														FORM 3		
				С	DEPARTMENT	T OF NA	-						AMENDED RE	PORT	1	
					DIVISION	OF OIL,	GAS AND M	IINING							_	
		APPL	ICATION F	OR PERMIT	TO DRILL					1.	WELL NA	ME and NUI	IBER aulsen 2-15C	5		
2. TYPE OF WORK DRILL NEW WELL REENTER P&A WELL DEEPEN WELL									3.	FIELD OR	WILDCAT	ALTAMONT				
4. TYPE OF WELL Oil Well Coalbed Methane Well: NO										5.	UNIT or C	OMMUNITI	ZATION AGR	EMENT	NAME	
6. NAME OF	OPERATOR		EP ENERGY I	E&P COMPANY	′, L.P.					7.	OPERATO	R PHONE	713 997-503	 B		
8. ADDRESS	OF OPERATOR			Houston, TX						9.	OPERATO	OR E-MAIL maria.c	omez@epene	rav.com		
	L LEASE NUMBER	R			RAL OWNERS	SHIP DIAN () STATE (3	(B)	- 1	. SURFAC	E OWNERSI	HIP	ATE ((iii)
13. NAME O	F SURFACE OWI	Fee NER (if box 12 = 'fe			OVEINE		y SINIE(7 122				E OWNER	PHONE (if bo	x 12 = 'fe		
15. ADDRES	S OF SURFACE	OWNER (if box 12 :	= 'fee')	Family Trust	idy, UT 84070					16	S. SURFAC		301-619-920 E-MAIL (if bo		e')	
17. INDIAN	ALLOTTEE OR TE		ulli 700 East	18. INTE	ND TO COMM	IINGLE	PRODUCTIO	N FROM		19	. SLANT					
(if box 12 =	'INDIAN')			YES	E FORMATIO (Submit C		gling Applicat	ion) NO	O		VERTICAL	DIRE	CTIONAL 📵	HORIZ	ZONTA	τ)
20. LOCAT	ION OF WELL			FOOTAGES		Q.	TR-QTR	SEC	CTION		TOWN	SHIP	RANGE		MER	RIDIAN
LOCATION	AT SURFACE		906	FNL 1814 F	WL		NENW	7	15		3.0	s	5.0 W			U
Top of Upp	permost Produci	ng Zone	120) FNL 1150 F	-WL	N	WWW	1	15		3.0	s	5.0 W			U
At Total D	epth		120	FNL 1150 F	FNL 1150 FWL NWNW			1	15		3.0	s	5.0 W			U
21. COUNT		CHESNE		22. DIST	ANCE TO NEA		EASE LINE (F 06	eet)		23	. NUMBER	OF ACRES	640	UNIT		
					ANCE TO NEA For Drilling	or Com		E POOL		26	s. PROPOS	SED DEPTH MD: 1	2338 TVD:	12300		
27. ELEVAT	ION - GROUND L	EVEL		28. BOND NUMBER							NG WATER / VAL NUMBER	IF APPLI	CABLE			
		5913		400JU0708					Duchesne City							
String	Hole Size	Casing Size	Li	Hole, Casing, and Cement Information Length Weight Grade & Thread Max			(Mu	d Wt.	Cemen	t Sacks	Yiel	d v	Weight			
COND	17.5	13.375		- 600	54.5	+	J-55 ST&0			8.8		Class G		1.1	_	15.8
SURF	12.25	9.625	0	1700	40.0		N-80 LT&	С		9.4		Type \	173	3.1	6	11.0
14	0.75	7		0000	20.0	<u> </u>	1100 440 17	500		0.0		Class G		1.3	_	14.3
I1	8.75	7	0	8938	29.0		HCP-110 LT	1&C		9.8		Class G	_	1.9	_	12.5
L1	6.125	5	8738	- 12338	18.0		HCP-110 LT	Г&С		11.	5	Class G		1.4	_	14.2
					Α	TTACE	HMENTS									
	VERIFY	THE FOLLOWIN	IG ARE AT	TACHED IN	ACCORDAN	ICE WI	TH THE UT	AH OIL A	ND GA	AS C	ONSERV	ATION GE	NERAL RUI	.ES		
W EL	L PLAT OR MAP I	PREPARED BY LICE	NSED SURV	EYOR OR ENG	GINEER		COMPLETE DRILLING PLAN									
I ✓ AFFI	DAVIT OF STATUS	S OF SURFACE OW	NER AGREEI	MENT (IF FEE	SURFACE)		FOR	M 5. IF OPE	ERATOI	R IS C	THER TH	AN THE LEA	SE OWNER			
I DIRE	CTIONAL SURVE	Y PLAN (IF DIRECT	IONALLY OF	R HORIZONTA	LLY DRILLED))	торо	OGRAPHIC	CAL MA	P						
NAME Maria S. Gomez TITLE Principal Regulatory Analyst						nalyst				PHON	E 713 99	7-5038				
SIGNATUR				OATE 02/05/2		•			_	EMAIL	L maria.go	mez@epene	ergy.com			
ADIAUMADA	ED ASSIGNED			PPPOVA!							101	`				
	er assigned 1352842000	00		APPROVAL					B	00		X				
								Perm	nit M	lanager						

Paulsen 2-15C5 Sec. 15, T3S, R5W DUCHESNE COUNTY, UT

EP ENERGY E&P COMPANY, L.P.

DRILLING PROGRAM

1. Estimated Tops of Important Geologic Markers

<u>Formation</u>	<u>Depth</u>
Green River (GRRV) Green River (GRTN1) Mahogany Bench L. Green River Wasatch T.D. (Permit)	3,930' TVD 4,880' TVD 5,760' TVD 7,050' TVD 8,830' TVD 12,300' TVD / 12,338' MD
1.D. (1 Cillin)	12,000 1 10 12,000 110

2. Estimated Depths of Anticipated Water, Oil, Gas or Mineral Formations:

Substance	<u>Formation</u>	<u>Depth</u>
Oil Oil	Green River (GRRV) Green River (GRTN1) Mahogany Bench L. Green River Wasatch	3,941' MD / 3,930' TVD 4,897' MD / 4,880' TVD 5,782' MD / 5,760' TVD 7,079' MD / 7,050' TVD 8,868' MD / 8,830' TVD

3. Pressure Control Equipment: (Schematic Attached)

A 4.5" by 20.0" rotating head on structural pipe from surface to 600' MD/TVD. A 4.5" by 13-3/8" Smith Rotating Head (Diverter System) from 600' MD/TVD to 1,700' MD/TVD on Conductor. A 5M BOP stack, 5M kill lines and choke manifold used from 1,700' MD/TVD to 8,938' MD/ 8,900' TVD. A 10M BOE w/ rotating head, 5M annular, blind rams & mud cross from 8,938' MD/ 8,900' TVD to TD (12,338' MD / 12,300' TVD).

The BOPE and related equipment will meet the requirements of the 5M and 10M system.

OPERATORS MINIMUM SPECIFICATIONS FOR BOPE:

The surface casing will be equipped with a flanged casing head of 5M psi working pressure. An 11" 5M x 11" 10M spool, 11" x 10M psi BOP and 5M psi annular will be nippled up on the surface casing and tested to 250 psi low test / 3,000 psi high test for 10 minutes each prior to drilling out. The surface casing will be tested to 1,000 psi, for 30 mins. Intermediate casing will be tested to the

greater of 1,500 psi or 0.22 psi/ft. The choke manifold equipment, upper Kelly cock and floor safety valves will be tested to 5M psi. The annular preventer will be tested to 250 psi low test / 4,000 psi high test. The 10M BOP will be installed with $3-\frac{1}{2}$ " pipe rams, blind rams, mud cross and rotating head from surface shoe to TD. The BOPE will be hydraulically operated.

In addition, the BOP equipment will be tested after running intermediate casing, after any repairs to the equipment and at least once every 30 days. Pipe and blind rams will be activated on each trip, annular preventer will be activated weekly and weekly BOP drills will be held with each crew.

<u>Statement on Accumulator System and Location of Hydraulic Controls:</u>

Precision Rig # 404 is expected to be used to drill the proposed well. Operations will commence after approval of this application. Manual and/or hydraulic controls will be in compliance with 5M and 10M psi systems.

Auxiliary Equipment:

- A) Pason Gas Monitoring 600' TD
- B) Mud logger with gas monitor 1,700' to TD
- C) Choke manifold with one manual and one hydraulic operated choke
- Full opening floor valve with drill pipe thread
- E) Upper and lower Kelly cock
- F) Shaker, de-sander and centrifuge

4. Proposed Casing & Cementing Program:

Please refer to the attached Wellbore Diagram.

All casing will meet or exceed the following design safety factors:

- Burst = 1.00
- Collapse = 1.125
- Tension = 1.2 (including 100k# overpull)

Cement design calculations for intermediate and production hole will be based on minimum 10% excess over gauge hole volumes. Actual volumes pumped will be a minimum of 10% excess over caliper volume to designed tops of cement for any section logged. A minimum of 50% excess over gauge volume will be pumped on surface casing.

5. **Drilling Fluids Program:**

Proposed Mud Program:

Interval	Type	Mud Weight
Surface	WBM	8.8 – 9.4
Intermediate	WBM	9.4 – 9.8
Production	WBM	9.8 – 11.5

Anticipated mud weights are based on actual offset well bottom-hole pressure data. Mud weights utilized may be somewhat higher to allow for trip margin and to provide hole stability for running logs and casing.

Visual mud monitoring equipment will be utilized.

6. **Evaluation Program**:

Logs:

Mud Log: 1,700' MD/TVD – TD

Open Hole Logs: Gamma Ray, Neutron-Density, Resistivity, Sonic, from surface casing shoe to TD.

7. Abnormal Conditions:

Maximum anticipated bottomhole pressure calculated at 12,300' TVD equals approximately 7,355 psi. This is calculated based on a 0.598 psi/ft gradient (11.5 ppg mud density at TD).

Maximum anticipated surface pressure equals approximately 4,649 psi (bottomhole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/ft).

Maximum anticipated surface pressure based on frac gradient at 7" casing shoe is 0.8 psi/ft at 8,900' TVD = 7,120 psi

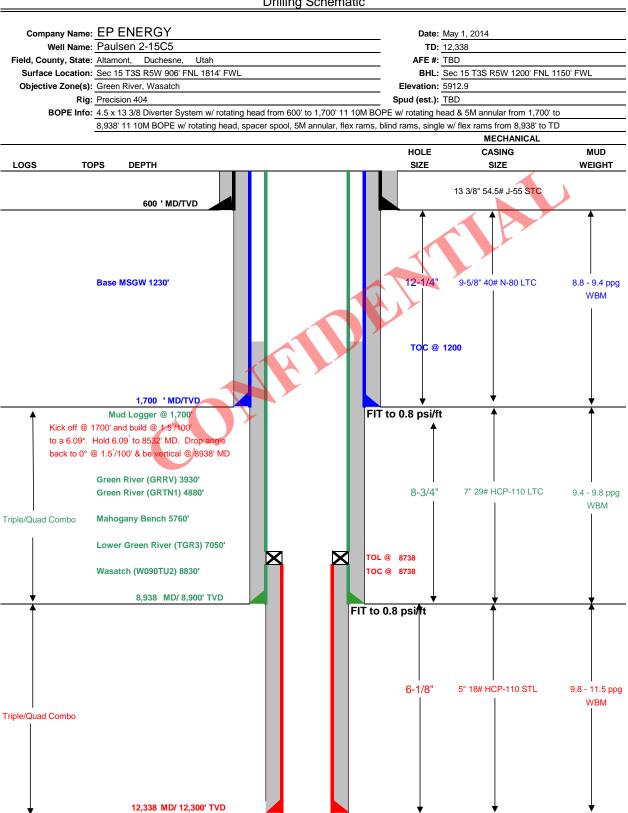
BOPE and casing design will be based on the lesser of the two MASPs which is 4,649 psi.

8. OPERATOR REQUESTS THAT THE PROPOSED WELL BE PLACED ON CONFIDENTIAL STATUS.

Page 1/2



Drilling Schematic



Page 2/2

DRILLING PROGRAM

CASING PROGRAM	SIZE	INTE	RVAL	WT.	GR.	CPLG.	BURST	COLLAPSE	TENSION
CONDUCTOR	13 3/8"	0	600	54.5	J-55	STC	2,740	1,130	514
SURFACE	9-5/8"	0	1700	40.00	N-80	LTC	5,750	3,090	737
INTERMEDIATE	7"	0	8938	29.00	HCP-110	LTC	11,220	9,750	797
PRODUCTION LINER	5'	8738	12338	18.00	HCP-110	STL	13,940	15,450	495

CEMENT PROGRA	M	FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
CONDUCTOR		600	Class G + 3% CACL2	758	100%	15.8 ppg	1.15
	Lead	1,200	EXTENDACEM SYSTEM: Type V Cement + 5 lbm/sk Silicalite Compacted + 0.25 lbm/sk Kwik Seal + 0.125 lbm/sk Poly- E-Flake + 2% Bentonite	173	75%	11.0 ppg	3.16
SURFACE	Tail	500	HALCEM SYSTEM: Glass G Cement + 3 lbm/sk Silicalite Compacted + 1% Salt + 0.3% Econolite + 0.25 lbm/sk Poly-E-Flake + 0.25 lbm/sk Kwik Seal + 0.5% HR-5	195	50%	14.3 ppg	1.30
INTERMEDIATE	Lead	5,388	EXPANDACEM SYSTEM: Class G Cement + 6% Bentonite + 0.2% Econolite + 0.3% Versaset + 0.7% HR-5 + 0.3% Super CBL + 0.2% Halad (R)-322 + 0.125 Ibm/sk Poly-E-Flake	465	10%	12.5 ppg	1.91
THE CONTRACT OF THE CONTRACT O	Tail	2,350	BONDCEM SYSTEM: Class G Cement + 4% Behtonite + 0.25 Poly-E-Flake + 0.1% Halad-413 + 5 lb/sk Silicalite Compacted + 0.15% SA-1015 + 0.5% HR-5	241	10%	13.0 ppg	1.65
PRODUCTION LINER		3,600	EXTENDACEM SYSTEM: Class G Cement + 0.3% Super CBL + 0.6% SCR- 100 + 0.3% Halad-413 + 0.125 lbm/sk Poly-E-Flake + 3 lbm/sk Silicalite Compacted + 20% SSA-1 + 0.1% SA- 1015	213	25%	14.20	1.47

FLOAT EQUIPMENT & CENTRALIZERS							
CONDUCTOR	PDC drillable guide shoe, 1 joint, PDC drillable float collar. Thread lock all float equipment. Install bow						
CONDUCTOR	spring centralizers on the bottom 3 joints of casing.						
SURFACE	PDC drillable guide shoe, 1 joint casing, PDC drillable float collar & Stage collar. Thread lock all float						
SURFACE	equipment. Install bow spring centralizers on the bottom 3 joints of casing & every 3rd joint thereafter.						
INTERMEDIATE	PDC drillable 10M,P-110 float shoe, 1 joint, PDC drillable 10M, P-110 float collar. Thread lock all float						
INTERIVIDIATE	equipment. Maker joint at 7,000'.						
LINER	Float shoe, 1 joint, float collar, 1 joint, landing collar. Thread lock all FE. Maker joints every 1000'.						

Brad Macafee	713-997-6383
Bob Dodd	

EP ENERGY E&P COMPANY, L.P. PAULSEN 2-15C4 SECTION 15, T3S, R4W, U.S.B.&M.

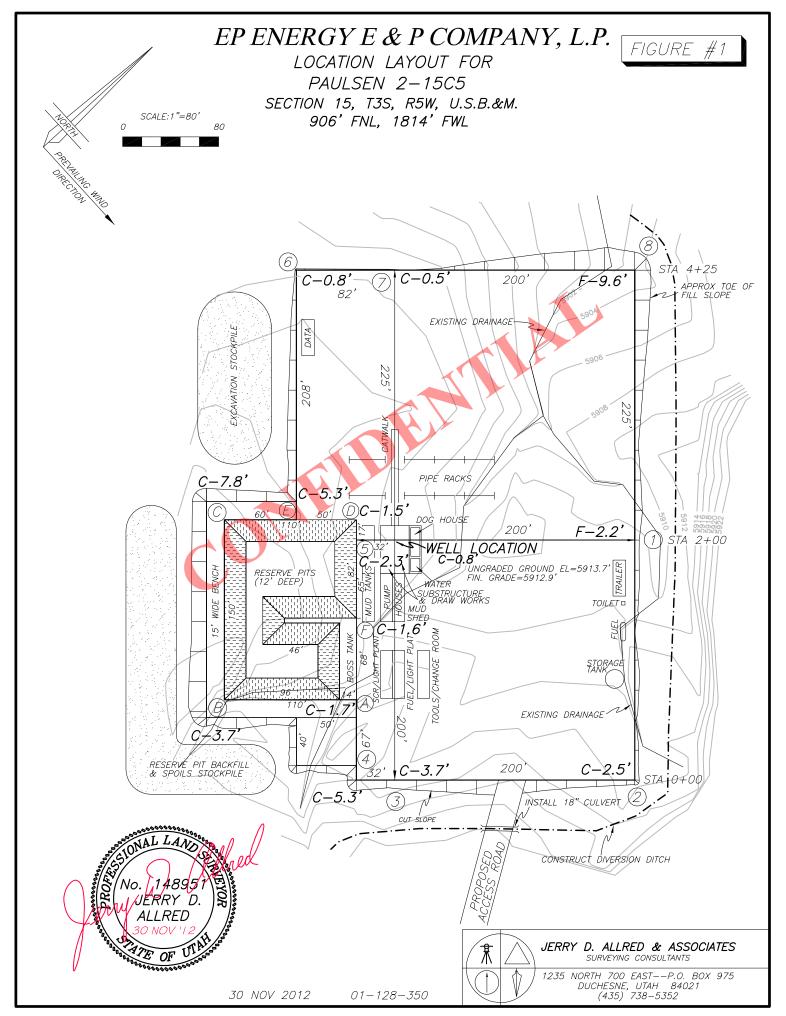
BEGIN AT THE INTERSECTION OF 700 WEST STREET AND US 40 IN DUCHESNE, UTAH AND PROCEED NORTH ON GRAVEL COUNTY B ROAD APPROXIMATELY 3.74 MILES;

CONTINUE NORTHERLY 1.03 MILES ON DIRT ROAD TO AN INTERSECTION;

TURN LEFT AND TRAVEL WEST AND THEN SOUTH 0.97 MILES ON A DIRT ROAD TO THE BEGINNING OF THE PROPOSED ACCESS ROAD;

TURN RIGHT AND FOLLOW ROAD FLAGS SOUTHWESTERLY 0.25 MILES TO THE PROPOSED WELL LOCATION;

TOTAL DISTANCE FROM DUCHESNE, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 5.99 MILES.



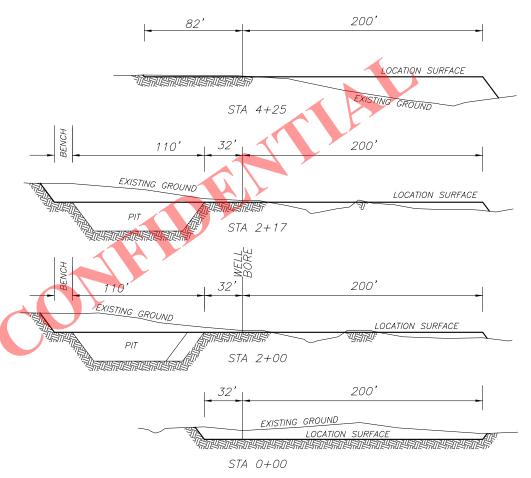
EP ENERGY E & P COMPANY, L.P.

906' FNL, 1814' FWL

FIGURE #2 LOCATION LAYOUT FOR PAULSEN 2-15C5 SECTION 15, T3S, R5W, U.S.B.&M.

X-SECTION SCALE 1"=80'

NOTE: ALL CUT/FILL SLOPES ARE 1½:1 UNLESS OTHERWISE NOTED



APPROXIMATE YARDAGES

TOTAL CUT (INCLUDING PIT) = 16,166 CU. YDS.

= 4572 CU. YDS. TOPSOIL STRIPPING: (6") = 2680 CU. YDS.
REMAINING LOCATION CUT = 8914 CU. YDS

TOTAL FILL = 8914 CU. YDS.

LOCATION SURFACE GRAVEL=1374 CU. YDS. (4" DEEP)

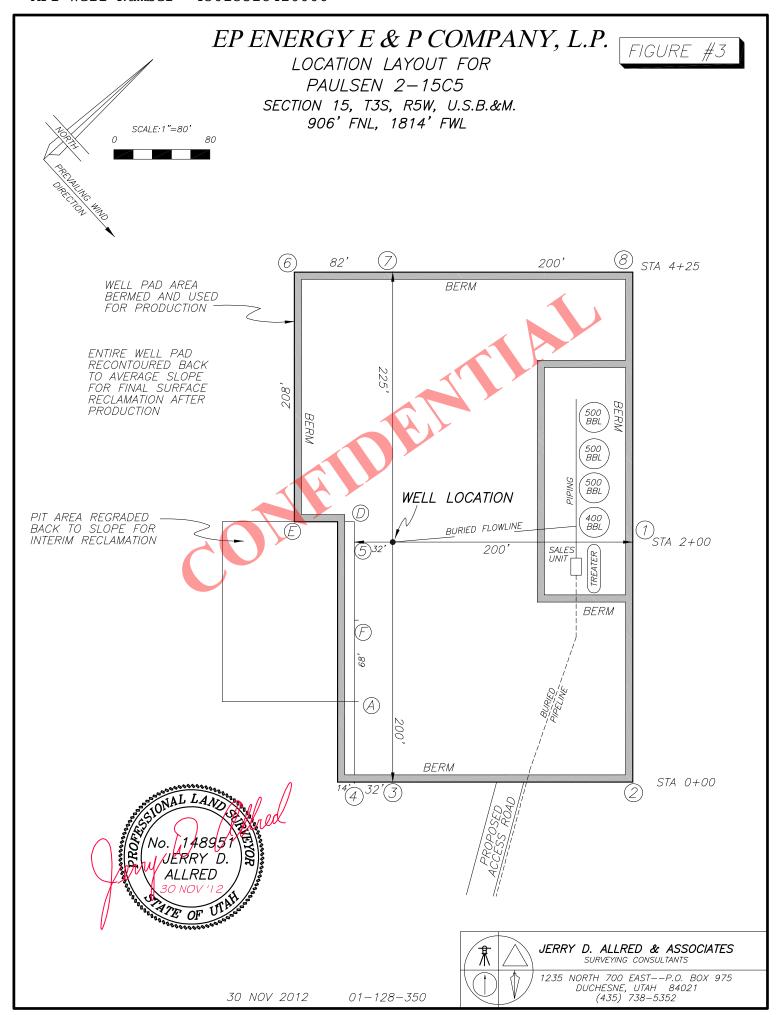
ACCESS ROAD GRAVEL=510 CU. YDS.





JERRY D. ALLRED & ASSOCIATES SURVEYING CONSULTANTS

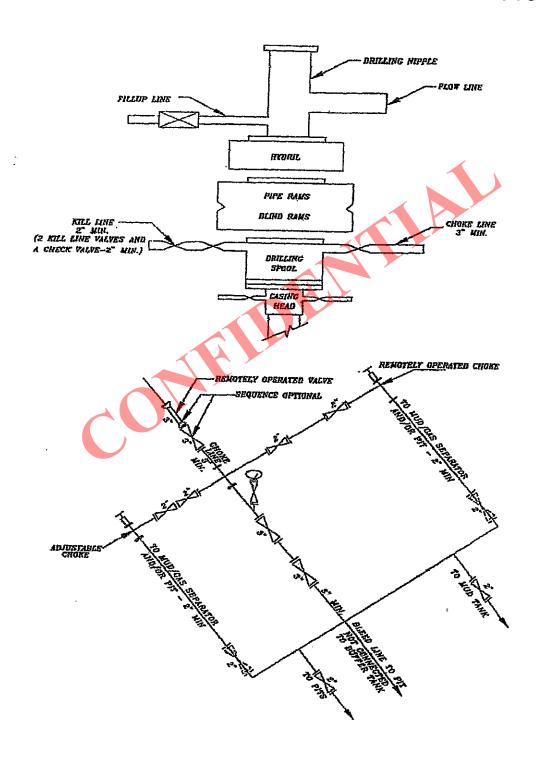
1235 NORTH 700 EAST——P.O. BOX 975 DUCHESNE, UTAH 84021 (435) 738—5352

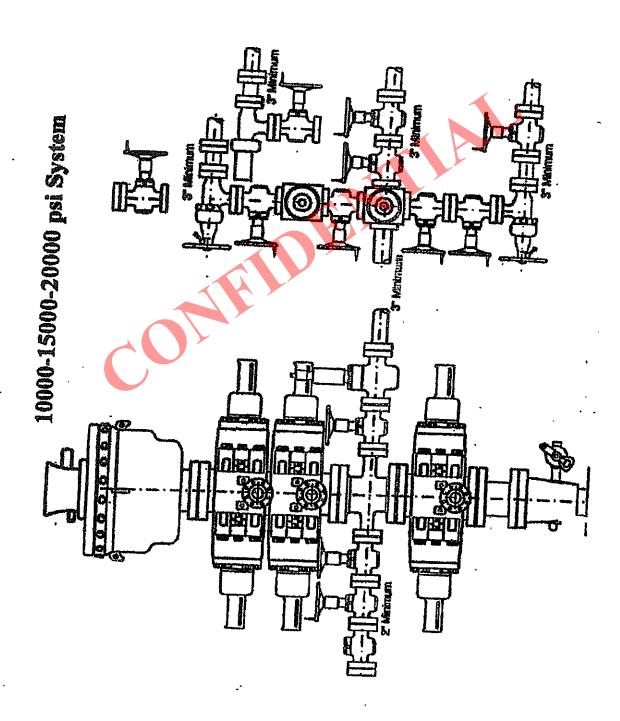


HOLE

975

5M BOP STACK and CHOKE MANIFOLD SYSTEM





LOCATED IN THE NE¼ OF THE NW¼ OF SECTION 15, T3S, R5W, U.S.B.&M. DUCHESNE COUNTY, UTAH EP ENERGY E & P COMPANY, L.P. WELL LOCATION PAULSEN 2-15C5 N 89°55' W 79.86 (G.L.O.) COUNTY MON N 89°49'27" E 2617.79 S 89°25'51" E 2637.58' COUNTY MON COUNTY MON . 89°53' (G.L.O.) NOR1 PAULSEN 2-15C5 ELEV. UNGRADED GROUND=5913.7' ELEV. FINISHED SURFACE=5912.9 WEST 1814' (Computed) 40 13'29.63502"N 110°26'21.72127"W}NAD83 725.28 · 5 | 65.53.20" LONG: **NORTH** 1-15C5 BOTTOM HOLE LOCATION: 1200' FNL, 1150' FWL 40°13'26.70838"N 110°26'30.25363"W } 0 SCALE: 1 "= 1000' 40.22412945°N { NAD27 0.1 110.44102547°W 1000 15 0.05 NOTE: NAD27 VALUES FOR WELL POSITION: LAT:40.22494241° N LONG:110.43865538° W

SURVEYOR'S CERTIFICATE

LEGEND AND NOTES

♦ CORNER MONUMENTS FOUND AND USED BY THIS SURVEY

THE GENERAL LAND OFFICE (G.L.O.) PLAT WAS USED FOR REFERENCE AND CALCULATIONS AS WAS THE U.S.G.S. MAP

THIS SURVEY WAS PERFORMED USING GLOBAL POSITIONING SYSTEM PROCEDURES AND EQUIPMENT

THE BASIS OF BEARINGS IS GEODETIC NORTH DERIVED FROM G.P.S. OBSERVATIONS AT THE NW CORNER OF SECTION 10, T3S, R5W, U.S.B.&M. LOCATED AT LAT 40°14'30.74528"N AND LONG 110°26'45.07537"W USING THE UTAH STATE VIRTUAL REFERENCE STATION CONTROL NETWORK MAINTAINED AND OPERATED BY THE AUTOMATED GEOGRAPHIC REFERENCE CENTER

BASIS OF ELEVATIONS: NAVD 88 DATUM USING THE UTAH REFERENCE NETWORK CONTROL SYSTEM

REV 4 JAN 2013 30 NOV 2012 01-128-350

I HEREBY CERTIFY THAT THIS PLAT WAS PREPARED FROM THE FIELD NOTES AND ELECTRONIC DATA COLLECTOR FILES OF AN ACTUAL SURVEY PERFORMED BY ME, OR UNDER MY PERSONAL SUPERVISION, DURING WHICH THE SHOWN MONUMENTS WERE FOUND OR REESTABLISHED.

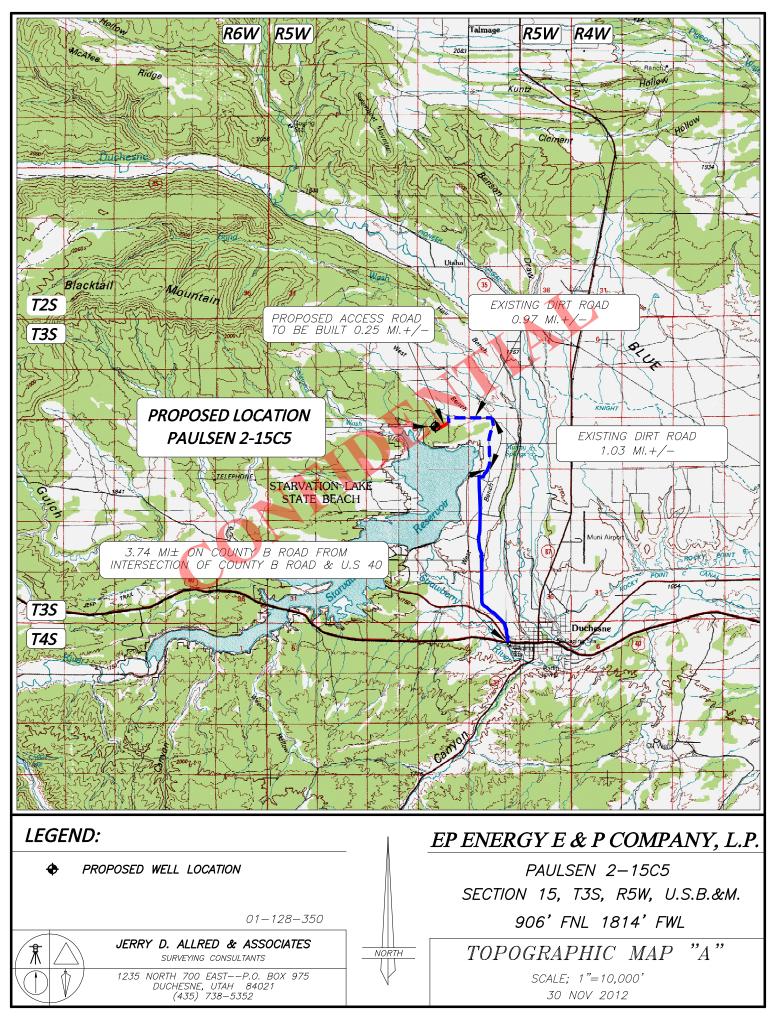


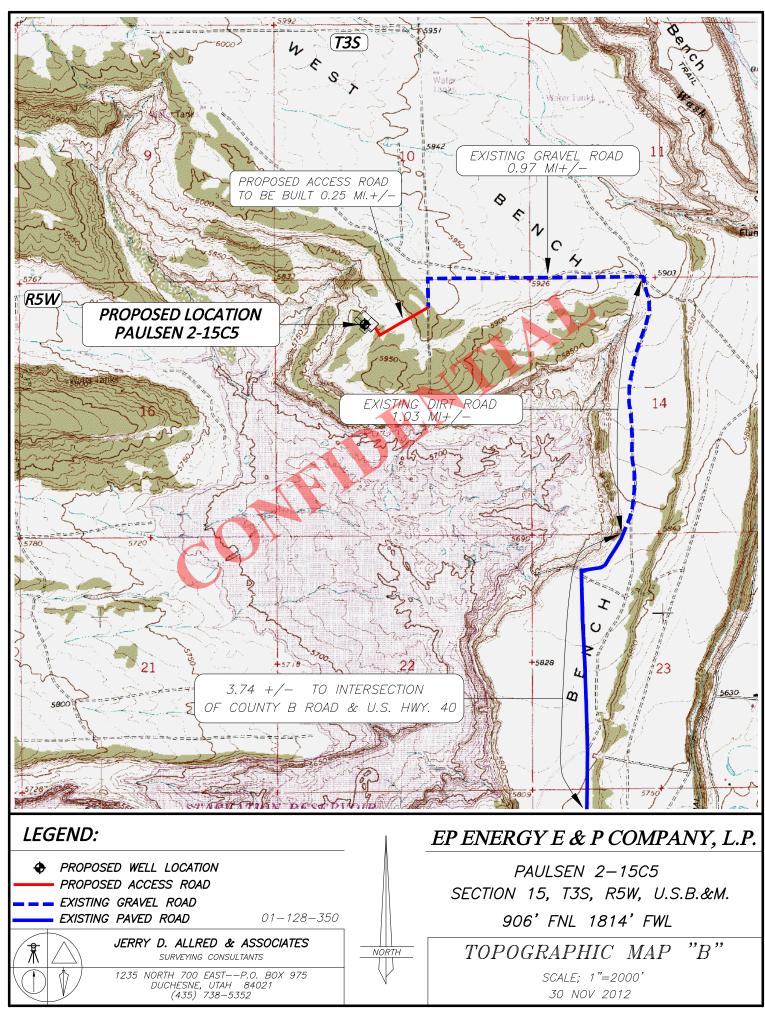
JERRY D. ALLRED, REGISTERED LAND SURVEYOR, CERTIFICATE NO. 148951 (UTAH)

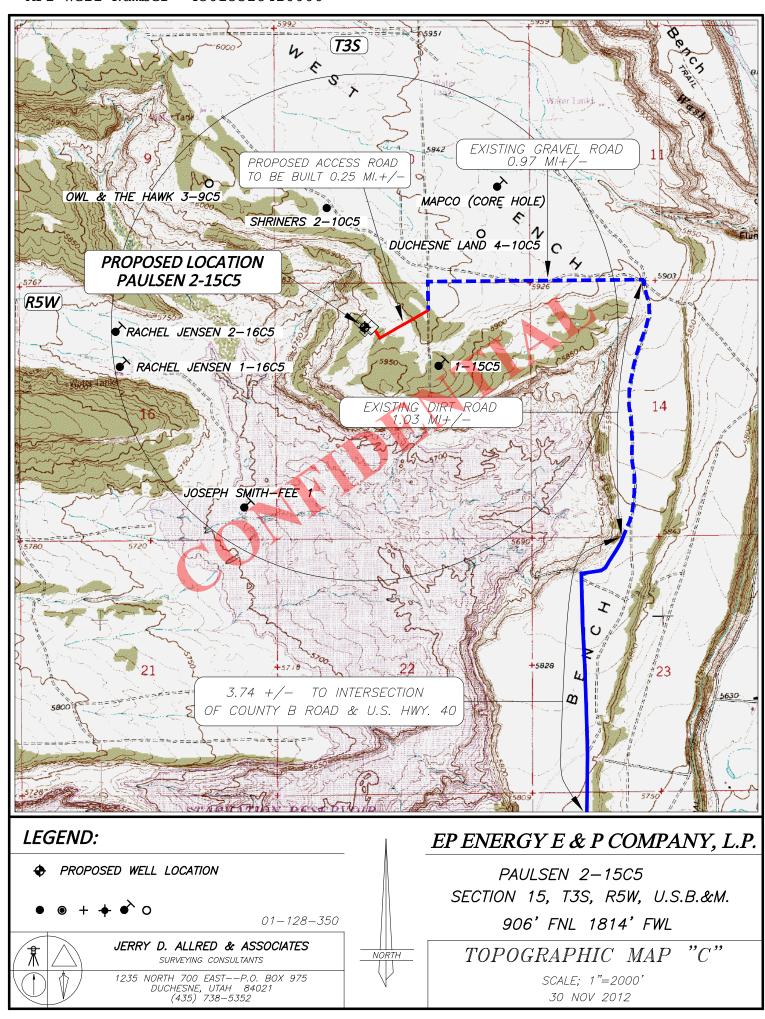


JERRY D. ALLRED & ASSOCIATES SURVEYING CONSULTANTS

1235 NORTH 700 EAST——P.O. BOX 975 DUCHESNE, UTAH 84021 (435) 738—5352









EP ENERGY

DUCHESNE COUNTY, UT PAULSEN 2-15C5 PAULSEN 2-15C5

PAULSEN 2-15C5

Plan: Design #1

PROPOSAL

04 February, 2014



EP ENERGY

DESIGN TARGET DETAILS

 Name
 TVD
 +N/-S
 +E/-W
 Latitude
 Longitude

 VP PAULSEN 2-15C5
 8900.00
 -296.13
 -661.79
 40° 13' 26.708 N
 110° 26' 30.254 W

 PBHL PAULSEN 2-15C5
 12300.00
 -296.13
 -661.79
 40° 13' 26.708 N
 110° 26' 30.254 W

WELL DETAILS: PAULSEN 2-15C5

Ground Level: 5913.00 +N/-S +E/-W Northing Easting Latittude Longitude 0.00 0.00 7252401.29 1936559.58 40° 13' 29.635 N 110° 26' 21.721 W

SECTION DETAILS

Inc Azi +E/-W Dleg 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 1700.00 0.00 0.00 1700.00 0.00 0.00 0.00 0.00 0.00 6.09 245.89 2105.35 -8.81 -19.69 1.50 245.89 21.57 2106.11 8531.70 6.09 245.89 8494.65 -287.32 -642.10 0.00 0.00 703.45 8937.81 0.00 0.00 8900.00 -296.13 -661.79 1.50 180.00 0.0012300.00 -296.13 -661.79 0.00 0.00 725.02 Annotation

Slot

SHL 906' FNL,1814'

FWL SEC 15 T3S R5W

PBHL 1200' FNL,1150'

FWL 296.13' S, 661.79' W

SEC 15 T3S R5W

Start Build 1.50 Start 6425.58 hold at 2106.11 MD Start Drop -1.50 Start 3400.00 hold at 8937.81 MD TD at 12337.81

PAULSEN 2-15C5/Design #1

TD at 12337.8

750-

-750

-3000

-3750

-4500-

-2250

-1500

-750

West(-)/East(+) (1500 ft/in)

South(-)/North(+) (1500 ft/in)

REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well PAULSEN 2-15C5, True North Vertical (TVD) Reference: WELL @ 5930.00ft (PRECISION 404) Section (VS) Reference: Slot - (0.00N, 0.00E) Measured Depth Reference: WELL @ 5930.00ft (PRECISION 404) Calculation Method: Minimum Curvature

FORMATION TOP DETAILS

Formation	MDPath	TVDPath
Green River (GRRV)	3941.13	4011.20
Green River (GRTN1)	4896.52	4961.20
Mahoganỳ Bench	5781.52	5841.20
Lower Green River (TGR3)	7078.84	7131.20
Wasatch (W090TU2)	8867.81	8911.20

T M Azimuths to True North Magnetic North: 11.25°

Magnetic Field Strength: 51956.2snT

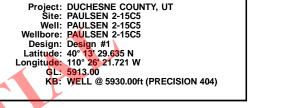
Magnetic Field Strength: 51956.2snT Dip Angle: 65.79° Date: 2/4/2014 Model: BGGM2013

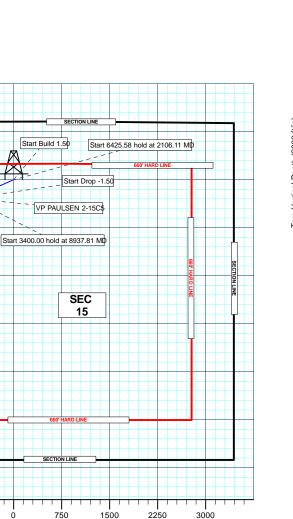
PROJECT DETAILS: DUCHESNE COUNTY, UT

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: Utah Central Zone
System Datum: Mean Sea Level

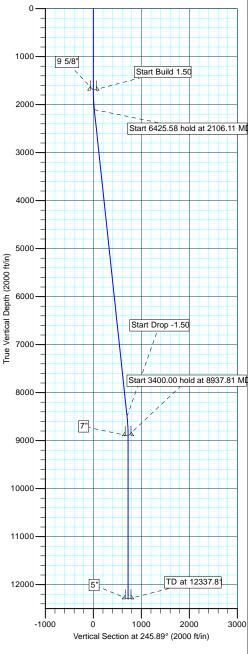
CASING I	DETAILS
----------	---------

TVD	MD	Name	Size	
1700.00	1700.00	9 5/8"	9-5/8	
8900.00	8937.81	7"	7	
12300.00	12337.81	5"	5	









Plan: Design #1 (PAULSEN 2-15C5/PAULSEN 2-15C5)

Date: 12:04, February 04 2014

Created By: THOMAS JANOUSEK



EP ENERGY

DUCHESNE COUNTY, UT PAULSEN 2-15C5 PAULSEN 2-15C5

PAULSEN 2-15C5

Plan: Design #1

Standard Planning Report

04 February, 2014





Weatherford

Planning Report



40° 13' 29.635 N

110° 26' 21.721 W

0.68°

EDM 5000.1 Single User Db Database:

Company: **EP ENERGY**

Project: DUCHESNE COUNTY, UT Site: PAULSEN 2-15C5 Well: PAULSEN 2-15C5 Wellbore: PAULSEN 2-15C5 Design #1 Design:

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well PAULSEN 2-15C5

WELL @ 5930.00ft (PRECISION 404) WELL @ 5930.00ft (PRECISION 404)

Minimum Curvature

Project DUCHESNE COUNTY, UT

US State Plane 1983 Map System:

North American Datum 1983 Geo Datum:

Utah Central Zone Map Zone:

System Datum: Mean Sea Level

PAULSEN 2-15C5 Site

Northing: 7,252,401.29 usft Site Position: Latitude: From: Lat/Long Easting: 1,936,559.58 usft Longitude:

Position Uncertainty: 0.00 ft Slot Radius: 13-3/16" Grid Convergence:

Well PAULSEN 2-15C5 7,252,401.29 usft **Well Position** +N/-S 0.00 ft Northing: Latitude: 40° 13' 29.635 N 1,936,559.58 usft +E/-W 0.00 ft Easting: Longitude: 110° 26' 21.721 W **Position Uncertainty** 0.00 ft Wellhead Elevation: ft Ground Level: 5,913.00 ft

Wellbore PAULSEN 2-15C5 Magnetics **Model Name** Sample Date Declination **Dip Angle** Field Strength (nT) (°) (°) 2/4/2014 BGGM2013 11.25 65.79 51,956

Design Design #1 Audit Notes: Tie On Depth: Version: Phase: PLAN 0.00 Vertical Section: Depth From (TVD) +N/-S +E/-W Direction (ft) (ft) (ft) (°) 0.00 245.89 0.00 0.00

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,106.11	6.09	245.89	2,105.35	-8.81	-19.69	1.50	1.50	0.00	245.89	
8,531.70	6.09	245.89	8,494.65	-287.32	-642.10	0.00	0.00	0.00	0.00	
8,937.81	0.00	0.00	8,900.00	-296.13	-661.79	1.50	-1.50	0.00	180.00	VP PAULSEN 2-15C
12,337.81	0.00	0.00	12,300.00	-296.13	-661.79	0.00	0.00	0.00	0.00	PBHL PAULSEN 2-15



Weatherford

Planning Report



Database: EDM 5000.1 Single User Db

Company: EP ENERGY

 Project:
 DUCHESNE COUNTY, UT

 Site:
 PAULSEN 2-15C5

 Well:
 PAULSEN 2-15C5

 Wellbore:
 PAULSEN 2-15C5

 Design:
 Design #1

Local Co-ordinate Reference: TVD Reference:

MD Reference: North Reference:

Survey Calculation Method:

Well PAULSEN 2-15C5

WELL @ 5930.00ft (PRECISION 404)
WELL @ 5930.00ft (PRECISION 404)

True

Design:	Design #1								
Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
4 000 00					7				
1,000.00	0.00	0.00 0.00	1,000.00	0.00	0.00	0.00 0.00	0.00	0.00	0.00
1,100.00	0.00		1,100.00	0.00	0.00		0.00	0.00	0.00
1,200.00 1,300.00	0.00 0.00	0.00 0.00	1,200.00 1,300.00	0.00	0.00	0.00	0.00 0.00	0.00 0.00	0.00 0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 1.									
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	1.50	245.89 🚄	1,799.99	-0.53	-1.19	1.31	1.50	1.50	0.00
1,900.00	3.00	245.89	1,899.91	-2.14	-4.78	5.23	1.50	1.50	0.00
2,000.00	4.50	245.89	1,999.69	-4.81	-10.75	11.77	1.50	1.50	0.00
Start 6425.58	hold at 2106.11	MD							
2,106.11	6.09	245.89	2,105.35	-8.81	-19.69	21.57	1.50	1.50	0.00
2,200.00	6.09	245.89	2,198.71	-12.88	-28.78	31.53	0.00	0.00	0.00
2,300.00	6.09	245.89	2,298.14	-17.21	-38.47	42.14	0.00	0.00	0.00
2,400.00	6.09	245.89	2,397.58	-21.55	-48.15	52.76	0.00	0.00	0.00
2,500.00	6.09	245.89	2,497.01	-25.88	-57.84	63.37	0.00	0.00	0.00
2,600.00	6.09	245.89	2,596.45	-30.22	-67.53	73.98	0.00	0.00	0.00
2,700.00	6.09	245.89	2,695.88	-34.55	-77.21	84.59	0.00	0.00	0.00
2,800.00	6.09	245.89	2,795.32	-38.89	-86.90	95.20	0.00	0.00	0.00
2,900.00	6.09	245.89	2,894.75	-43.22	-96.59	105.82	0.00	0.00	0.00
3,000.00	6.09	245.89	2,994.19	-47.55	-106.27	116.43	0.00	0.00	0.00
3,100.00	6.09	245.89	3,093.62	-51.89	-115.96	127.04	0.00	0.00	0.00
3,200.00	6.09	245.89	3,193.06	-56.22	-125.65	137.65	0.00	0.00	0.00
3,300.00	6.09	245.89	3,292.49	-60.56	-135.33	148.26	0.00	0.00	0.00
3,400.00	6.09	245.89	3,391.93	-64.89	-145.02	158.88	0.00	0.00	0.00
3,500.00	6.09	245.89	3,491.36	-69.23	-154.71	169.49	0.00	0.00	0.00
3,500.00	6.09	245.89 245.89	3,491.36	-69.23 -73.56	-154.71 -164.39	180.10	0.00	0.00	0.00
3,700.00	6.09	245.89	3,690.24	-73.56 -77.89	-104.39 -174.08	190.71	0.00	0.00	0.00
3,800.00	6.09	245.89	3,789.67	-82.23	-174.06	201.32	0.00	0.00	0.00
3,900.00	6.09	245.89	3,889.11	-86.56	-193.45	211.94	0.00	0.00	0.00
,			-,		*****				
Green River (•	045.00	2 020 00	90.05	107.44	240.20	0.00	0.00	0.00
3,941.13	6.09	245.89	3,930.00 3,988.54	-88.35	-197.44	216.30	0.00	0.00 0.00	0.00
4,000.00	6.09	245.89		-90.90 05.23	-203.14	222.55	0.00		0.00
4,100.00 4,200.00	6.09 6.09	245.89 245.89	4,087.98 4,187.41	-95.23 -99.57	-212.83 -222.51	233.16 243.77	0.00 0.00	0.00 0.00	0.00 0.00
4,300.00	6.09	245.89	4,187.41	-99.57 -103.90	-232.20	254.38	0.00	0.00	0.00
4,400.00	6.09	245.89	4,386.28	-108.24	-241.88	265.00	0.00	0.00	0.00
4,500.00	6.09	245.89	4,485.72	-112.57	-251.57	275.61	0.00	0.00	0.00
4,600.00	6.09	245.89	4,585.15	-116.90	-261.26	286.22	0.00	0.00	0.00
4,700.00	6.09	245.89	4,684.59	-121.24	-270.94	296.83	0.00	0.00	0.00
4,800.00	6.09	245.89	4,784.02	-125.57	-280.63	307.44	0.00	0.00	0.00



Weatherford Planning Report



Database: EDM 5000.1 Single User Db

Company: EP ENERGY

 Project:
 DUCHESNE COUNTY, UT

 Site:
 PAULSEN 2-15C5

 Well:
 PAULSEN 2-15C5

 Wellbore:
 PAULSEN 2-15C5

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well PAULSEN 2-15C5

WELL @ 5930.00ft (PRECISION 404)
WELL @ 5930.00ft (PRECISION 404)

True

esign:		Design #1								
lanned Su	rvey									
	asured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Vertical Section	Dogleg Rate	Build Rate	Turn Rate
	(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100usft)	(°/100usft)	(°/100usft)
Gr	reen River (GRTN1)								
	4,896.52	6.09	245.89	4,880.00	-129.76	-289.98	317.69	0.00	0.00	0.00
	4,900.00	6.09	245.89	4,883.46	-129.91	-290.32	318.06	0.00	0.00	0.00
	5,000.00	6.09	245.89	4,982.89	-134.24	-300.00	328.67	0.00	0.00	0.00
	5,100.00	6.09	245.89	5,082.33	-138.58	-309.69	339.28	0.00	0.00	0.00
	5,200.00	6.09	245.89	5,181.77	-142.91	-319.38	349.89	0.00	0.00	0.00
	5,300.00	6.09	245.89	5,281.20	-147.24	-329.06	360.50	0.00	0.00	0.00
	5,400.00	6.09	245.89	5,380.64	-151.58	-338.75	371.12	0.00	0.00	0.00
	5,500.00	6.09	245.89	5,480.07	-155.91	-348.44	381.73	0.00	0.00	0.00
	5,600.00	6.09	245.89	5,579.51	-160.25	-358.12	392.34	0.00	0.00	0.00
	5,700.00	6.09	245.89	5,678.94	-164.58	-367.81	402.95	0.00	0.00	0.00
			245.69	5,076.94	-104.56	-307.01	402.93	0.00	0.00	0.00
	ahogany Be 5,781.52	ench 6.09	245.89	5,760.00	-168.12	-375.71	411.60	0.00	0.00	0.00
	5,800.00	6.09	245.89	5,778.38	-168.92	-377.50	413.56	0.00	0.00	0.00
	5,900.00	6.09	245.89	5,776.36 5,877.81	-173.25	-377.50 -387.18	424.18	0.00	0.00	0.00
		6.09		,	-173.25	-396.87				
	6,000.00		245.89	5,977.25			434.79	0.00	0.00	0.00
	6,100.00	6.09 6.09	245.89 245.89	6,076.68 6,176.12	-181.92	-406.55	445.40	0.00	0.00	0.00
	6,200.00				-186.25	-416.24	456.01		0.00	0.00
	6,300.00	6.09	245.89	6,275.55	-190.59	-425.93	466.62	0.00	0.00	0.00
	6,400.00	6.09	245.89	6,374.99	-194.92	-435.61	477.24	0.00	0.00	0.00
	6,500.00	6.09	245.89	6,474.42	-199.26	-445.30	487.85	0.00	0.00	0.00
	6,600.00	6.09	245.89	6,573.86	-203.59	-454.99	498.46	0.00	0.00	0.00
	6,700.00	6.09	245.89	6,673.30	-207.93	-464.67	509.07	0.00	0.00	0.00
(6,800.00	6.09	245.89	6,772.73	-212.26	-474.36	519.68	0.00	0.00	0.00
(6,900.00	6.09	245.89	6,872.17	-216.59	-484.05	530.30	0.00	0.00	0.00
	7,000.00	6.09	245.89	6,971.60	-220.93	-493.73	540.91	0.00	0.00	0.00
Lo	wer Green	River (TGR3)								
	7,078.84	6.09	245.89	7,050.00	-224.35	-501.37	549.28	0.00	0.00	0.00
	7,100.00	6.09	245.89	7,071.04	-225.26	-503.42	551.52	0.00	0.00	0.00
	7,200.00	6.09	245.89	7,170.47	-229.60	-513.11	562.13	0.00	0.00	0.00
	7,300.00	6.09	245.89	7,269.91	-233.93	-522.79	572.74	0.00	0.00	0.00
	7,400.00	6.09	245.89	7,369.34	-238.27	-532.48	583.36	0.00	0.00	0.00
	7,500.00	6.09	245.89	7,468.78	-242.60	-542.17	593.97	0.00	0.00	0.00
	7,600.00	6.09	245.89	7,568.21	-246.94	-551.85	604.58	0.00	0.00	0.00
	7,700.00	6.09	245.89	7,667.65	-251.27	-561.54	615.19	0.00	0.00	0.00
	7,800.00	6.09	245.89	7,767.08	-255.60	-571.22	625.80	0.00	0.00	0.00
	7,900.00	6.09	245.89	7,866.52	-259.94	-580.91	636.42	0.00	0.00	0.00
	8,000.00	6.09	245.89	7,965.95	-264.27	-590.60	647.03	0.00	0.00	0.00
	8,100.00	6.09	245.89	8,065.39	-268.61	-600.28	657.64	0.00	0.00	0.00
	8,200.00	6.09	245.89	8,164.83	-272.94	-609.97	668.25	0.00	0.00	0.00
	8,300.00	6.09	245.89	8,264.26	-277.28	-619.66	678.86	0.00	0.00	0.00
	8,400.00	6.09	245.89	8,363.70	-281.61	-629.34	689.48	0.00	0.00	0.00
	8,500.00	6.09	245.89	8,463.13	-201.01 -285.95	-629.34 -639.03	700.09	0.00	0.00	0.00
			240.08	0,403.13	-200.90	-038.03	7 00.08	0.00	0.00	0.00
	art Drop -1. 8,531.70	6.09	245.89	8,494.65	-287.32	-642.10	703.45	0.00	0.00	0.00
	,			8,562.63			703.45 710.09			
	8,600.00	5.07	245.89		-290.03	-648.16		1.50	-1.50	0.00
	8,700.00	3.57	245.89	8,662.34	-293.11	-655.03	717.62	1.50	-1.50	0.00
	8,800.00	2.07	245.89	8,762.22	-295.11	-659.52	722.54	1.50	-1.50	0.00
	asatch (W0 8,867.81	90TU2) 1.05	245.89	8,830.00	-295.87	-661.20	724.38	1.50	-1.50	0.00
	8,900.00	0.57	245.89	8,862.19	-296.05	-661.62	724.83	1.50	-1.50	0.00
		hold at 8937.81		0,002.13	-230.03	-001.02	124.00	1.50	-1.50	0.00
	8,937.81	0.00	0.00	8,900.00	-296.13	-661.79	725.02	1.50	-1.50	0.00



Weatherford Planning Report



Database: EDM 5000.1 Single User Db

Company: EP ENERGY

 Project:
 DUCHESNE COUNTY, UT

 Site:
 PAULSEN 2-15C5

 Well:
 PAULSEN 2-15C5

 Wellbore:
 PAULSEN 2-15C5

 Design:
 Design #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well PAULSEN 2-15C5

WELL @ 5930.00ft (PRECISION 404)
WELL @ 5930.00ft (PRECISION 404)

True

ned Survey									
neu Survey									
Measured			Vertical			Vertical	Dogleg	Build	Turn
Depth	Inclination	Azimuth	Depth	+N/-S	+E/-W	Section	Rate	Rate	Rate
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100usft)	(°/100usft)	(°/100usft)
9,000.00	0.00	0.00	8,962.19	-296.13	-661.79	725.02	0.00	0.00	0.00
9,100.00	0.00	0.00	9,062.19	-296.13	-661.79	725.02	0.00	0.00	0.00
9,200.00	0.00	0.00	9,162.19	-296.13	-661.79	725.02	0.00	0.00	0.00
9,300.00	0.00	0.00	9,262.19	-296.13	-661.79	725.02	0.00	0.00	0.00
9,400.00	0.00	0.00	9,362.19	-296.13	-661.79	725.02	0.00	0.00	0.00
9,500.00	0.00	0.00	9,462.19	-296.13	-661.79	725.02	0.00	0.00	0.00
9,600.00	0.00	0.00	9,562.19	-296.13	-661.79	725.02	0.00	0.00	0.00
9,700.00	0.00	0.00	9,662.19	-296.13	-661.79	725.02	0.00	0.00	0.00
9,800.00	0.00	0.00	9,762.19	-296.13	-661.79	725.02	0.00	0.00	0.00
9,900.00	0.00	0.00	9,862.19	-296.13	-661.79	725.02	0.00	0.00	0.00
10,000.00	0.00	0.00	9,962.19	-296.13	-661.79	725.02	0.00	0.00	0.00
10,100.00	0.00	0.00	10,062.19	-296.13	-661.79	725.02	0.00	0.00	0.00
10,200.00	0.00	0.00	10,162.19	-296.13	-661.79	725.02	0.00	0.00	0.00
10,300.00	0.00	0.00	10,262.19	-296.13	-661.79	725.02	0.00	0.00	0.00
10,400.00	0.00	0.00	10,362.19	-296.13	-661.79	725.02	0.00	0.00	0.00
10,500.00	0.00	0.00	10,462.19	-296.13	-661.79	725.02	0.00	0.00	0.00
10,600.00	0.00	0.00	10,562.19	-296.13	-661.79	725.02	0.00	0.00	0.00
10,700.00	0.00	0.00	10,662.19	-296.13	-661.79	725.02	0.00	0.00	0.00
10,800.00	0.00	0.00	10,762.19	-296.13	-661.79	725.02	0.00	0.00	0.00
10,900.00	0.00	0.00	10,862.19	-296.13	-661.79	725.02	0.00	0.00	0.00
11,000.00	0.00	0.00	10,962.19	-296.13	-661.79	725.02	0.00	0.00	0.00
11,100.00	0.00	0.00	11.062.19	-296.13	-661.79	725.02	0.00	0.00	0.00
11,200.00	0.00	0.00	11,162.19	-296.13	-661.79	725.02	0.00	0.00	0.00
11,300.00	0.00	0.00	11,262.19	-296.13	-661.79	725.02	0.00	0.00	0.00
11,400.00	0.00	0.00	11,362.19	-296.13	-661.79	725.02	0.00	0.00	0.00
11,500.00	0.00	0.00	11,462.19	-296.13	-661.79	725.02	0.00	0.00	0.00
11,600.00	0.00	0.00	11,562.19	-296.13	-661.79	725.02	0.00	0.00	0.00
11,700.00	0.00	0.00	11,662.19	-296.13	-661.79	725.02	0.00	0.00	0.00
11,800.00	0.00	0.00	11,762.19	-296.13	-661.79	725.02	0.00	0.00	0.00
11,900.00	0.00	0.00	11,762.19	-296.13 -296.13	-661.79 -661.79	725.02	0.00	0.00	0.00
,			,			725.02 725.02		0.00	
12,000.00	0.00 0.00	0.00	11,962.19 12,062.19	-296.13 -296.13	-661.79 -661.79	725.02 725.02	0.00 0.00	0.00	0.00 0.00
12,100.00		0.00							
12,200.00	0.00	0.00	12,162.19	-296.13	-661.79	725.02	0.00	0.00	0.00
12,300.00	0.00	0.00	12,262.19	-296.13	-661.79	725.02	0.00	0.00	0.00
TD at 12337.8									
12,337.81	0.00	0.00	12,300.00	-296.13	-661.79	725.02	0.00	0.00	0.00

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
VP PAULSEN 2-15C5 - plan hits target center - Point	0.00 er	0.00	8,900.00	-296.13	-661.79	7,252,097.34	1,935,901.36	40° 13' 26.708 N	110° 26' 30.254 W
PBHL PAULSEN 2-15Ct - plan hits target cent - Point	0.00 er	0.00	12,300.00	-296.13	-661.79	7,252,097.34	1,935,901.36	40° 13' 26.708 N	110° 26' 30.254 W



Weatherford

Planning Report



Database: EDM 5000.1 Single User Db

Company: EP ENERGY

 Project:
 DUCHESNE COUNTY, UT

 Site:
 PAULSEN 2-15C5

 Well:
 PAULSEN 2-15C5

 Wellbore:
 PAULSEN 2-15C5

 Design:
 Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well PAULSEN 2-15C5

WELL @ 5930.00ft (PRECISION 404) WELL @ 5930.00ft (PRECISION 404)

True

Casing Points						
	Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
	12,337.81	12,300.00	5"	5	6-1/8	
	8,937.81	8,900.00	7"	7	8-3/4	
	1,700.00	1,700.00	9 5/8"	9-5/8	12-1/4	

Formations						
	Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
	3,941.13	3,930.00	Green River (GRRV)		0.00	
	4,896.52	4,880.00	Green River (GRTN1)		0.00	
	5,781.52	5,760.00	Mahogany Bench		0.00	
	7,078.84	7,050.00	Lower Green River (TGR3)	X 1>	0.00	
	8,867.81	8,830.00	Wasatch (W090TU2)		0.00	

Plan Annotations					
Measured	Vertical	Local Coordi	inates		
Depth	Depth	+N/-S	+E/-W		
(ft)	(ft)	(ft)	(ft)	Comment	
1,700.00	1,700.00	0.00	0.00	Start Build 1.50	
2,106.11	2,105.35	-8.81	-19.69	Start 6425.58 hold at 2106.11 MD	
8,531.70	8,494.65	-287.32	-642.10	Start Drop -1.50	
8,937.81	8,900.00	-296.13	-661.79	Start 3400.00 hold at 8937.81 MD	
12.337.81	12,300,00	-296.13	-661.79	TD at 12337.81	

AFFIDAVIT OF DAMAGE SETTLEMENT AND RELEASE

Jacquelyn L. Lynch personally appeared before me, and, being duly sworn, deposes and says:

- My name is Jacquelyn L. Lynch. I am a Landman for EP Energy E&P Company, L.P., whose address is 1001 Louisiana St., Houston, Texas 77002 ("EP Energy").
- 2. EP Energy is the operator of the proposed Paulsen 2-15C5 well (the "Well") to be located in the NE/4NW/4 of Section 15, Township 3 South, Range 5 West, USM, Duchesne County, Utah (the "Drillsite Location"). The surface owner of the Drillsite Location is Paulsen Family Trust Dated 1/27/03, whose address is 8494 South 700 East, Suite 150, Sandy, Utah 84070 (the "Surface Owner"). The Surface Owner's telephone number is (801) 619-9200.
- 3. EP Energy and the Surface Owner have entered into a Damage Settlement and Release Agreement dated January 11, 2014, to cover any and all injuries or damages of every character and description sustained by the Surface Owner or Surface Owner's property as a result of operations associated with the drilling of the Well.

FURTHER AFFIANT SAYETH NOT.

sacqueryn L. Lynci

ACKNOWLEDGMENT

STATE OF TEXAS

888

COUNTY OF HARRIS

Sworn to and subscribed before me on this 21th day of January, 2014, by Jacquelyn L.

NOTARY PUBLIC

Lynch, as Landman for EP Energy E&P Company, L.P., a Delaware limited partnership.

My Commission Expires:

GINGER M CEARLEY

STATE OF TEXAS
MY COMMISSION EXPIRES

AUG. 2, 2014

API Well Number: 43013528420000 Application for Permit to Drill – State DOGM

Paulsen 2-15C5 Duchesne County, Utah

EP Energy E&P Company, L.P.

Related Surface Information

1. <u>Current Surface Use:</u>

Livestock Grazing and Oil and Gas Production.

2. <u>Proposed Surface Disturbance:</u>

- The road will be crown and ditch. Water wings will be constructed on the access road as needed.
- The topsoil will be windrowed and re-spread in the borrow area.
- New road to be constructed will be approximately .25 miles in length and 66 feet wide.
- All equipment and vehicles will be confined to the access road, pad and area specified in the APD.

3. Location Of Existing Wells:

Existing oil, gas wells within one (1) mile radius of proposed well are provided in EXHIBIT C.

4. <u>Location And Type Of Drilling Water Supply:</u>

• Drilling water: Duchesne City Water

5. Existing/Proposed Facilities For Productive Well:

- There are no existing facilities that will be utilized for this well.
- A pipeline corridor .25 miles will parallel the proposed access road. The corridor will contain one 4 inch gas line
 and one 2 inch gas line and one 2 inch Salt Water disposal line. Rehabilitation of unneeded, previously disturbed
 areas will consist of backfilling and contouring the reserve pit area; backsloping and contouring all cut and fill
 slopes. These areas will be reseeded. Refer to plans for reclamation of surface for details.
- Upgrade and maintain access roads and drainage control structures (e.g., culverts, drainage dips, ditching, etc.) as necessary to prevent soil erosion and accommodate safe, year-round traffic.

6. Construction Materials:

 Native soil from road and location will be used for construction materials along with gravel and/or scoria road base material. In the event that conditions should necessitate graveling of all or part of the access road and location, surfacing materials will be purchased from commercial suppliers in the marketing area.

7. Methods For Handling Waste Disposal:

- The reserve pit will be designed to prevent the collection of surface runoff and will be constructed with a minimum of ½ the total depth below the original ground surface on the lowest point with the pit. The pit will be lined with a 20-mil polyethylene to prevent leakage of fluids. The liner will be rolled into place and secured at the ends, i.e. buried on top of the pit berms. Prior to use, the reserve pit will be fenced on three sides; the fourth side will be fenced at the time the rig is removed. Drilling fluids, cuttings and produced water will be contained in the reserve pit (trash will be place in the trash cage). Fluids in the reserve pit will be allowed to evaporate prior to pit burial.
- Garbage and other trash will be contained in the portable trash cage and hauled off the location to an authorized disposal site. Any trash on the pad will be cleaned up prior to the rig moving off location and hauled to an authorized disposal site.
- Sewage will be handled in Portable Toilets.
- Produced water will be placed in the reserve pit for a period not to exceed ninety days after initial production. Any
 hydrocarbons produced during completion work will be contained in test tanks and removed from the location at a
 later date.
- Water from the reserve pit may be used for drilling of additional wells. The water will be trucked along access roads as approved in pertinent APD's

8. Ancillary Facilities:

There will be no ancillary facilities associated with this project.

API Well Number: 43013528420000 Page 2 Application for Permit to Drill – State DOGM

Paulsen 2-15C5
Duchesne County, Utah

9. Surface Reclamation Plans:

Backfilling of the pits will be done when dry. In the event of a dry hole, the location will be re-contoured, the topsoil will be distributed evenly over the entire location, and the seedbed prepared.

- Seed will be planted after September 15th, and prior to ground frost, or seed will be planted after the frost has left and before May 15th. Slopes to steep for machinery will be hand broadcast and raked with twice the specified amount of seed.
 - 1. The construction program and design are on the attached cut, fill and cross sectional diagrams.
 - 2. Prior to construction, all topsoil will be removed from the entire site and stockpiled. Topsoil for this site is the first 6 inches of soil materials.
 - 3. After the location has been reshaped and after redistributing the topsoil, the operator will rip and scarify the drilling platform and access road on the contour, to a depth of at least 12 inches.
- Rehabilitation will begin upon the completion of the drilling. Complete rehabilitation will depend on weather conditions and the amount of time required to dry the reserve pit.
 - 1. All rehabilitation work including seeding will be completed as soon as weather and the reserve pit conditions are appropriate.
 - 2. Landowner will be contacted for rehabilitation requirements.

10. Surface Ownership:

Paulsen Family Trust 8494 South 700 East, Suite 150 Sand, Utah 84070 801-619-9200

Other Information:

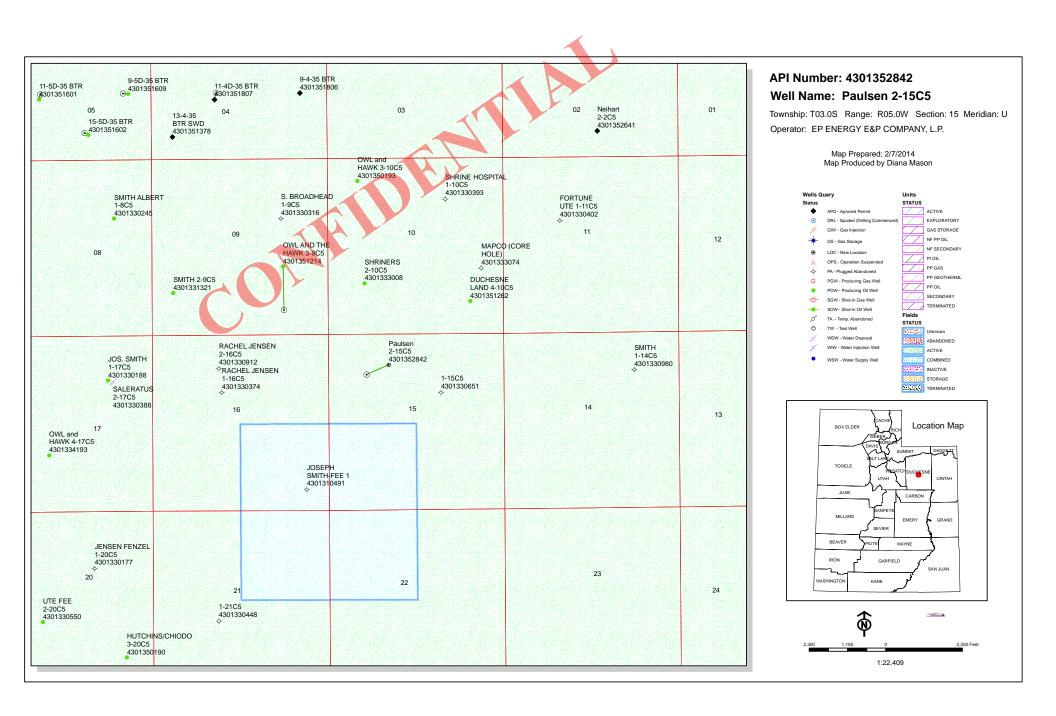
- The surface soil consists of clay, and silt.
- Flora vegetation consists of the following: Sagebrush, Juniper and prairie grasses.
- Fauna antelope, deer, coyotes, raptors, small mammals, and domestic grazing animals.
- Current surface uses Livestock grazing and mineral exploration and production.
- Operator and Contact Persons:

Construction and Reclamation:
EP Energy E&P Company, L.P.
Wayne Garner
PO Box 410
Altamont, Utah 84001
435-454-3394 – Office
435-823-1490 – Cell

Regarding This APD
EP Energy E&P Company, L.P.
Maria S. Gomez
1001 Louisiana, Rm 2730D
Houston, Texas 77002
713-997-5038 – Office

Drilling

EP Energy E&P Company, L.P. Brad MacAfee – Drilling Engineer 1001 Louisiana, Rm 2660D Houston, Texas 77002 713-997-6383 – office 281-813-0902 – Cell



BOPE REVIEW EP ENERGY E&P COMPANY, L.P. 5C5 43013528420000

Well Name	EP ENERGY E&P COMPANY, L.P. Paulsen 2-15C5 43013					
String	COND	SURF	11	L1		
Casing Size(")	13.375	9.625	7.000	5.000		
Setting Depth (TVD)	600	1700	8938	12300		
Previous Shoe Setting Depth (TVD)	0	600	1700	8938		
Max Mud Weight (ppg)	8.8	9.4	9.8	11.5		
BOPE Proposed (psi)	1000	1000	5000	10000		
Casing Internal Yield (psi)	2730	5750	11220	13940		
Operators Max Anticipated Pressure (psi)	7355			11.5		

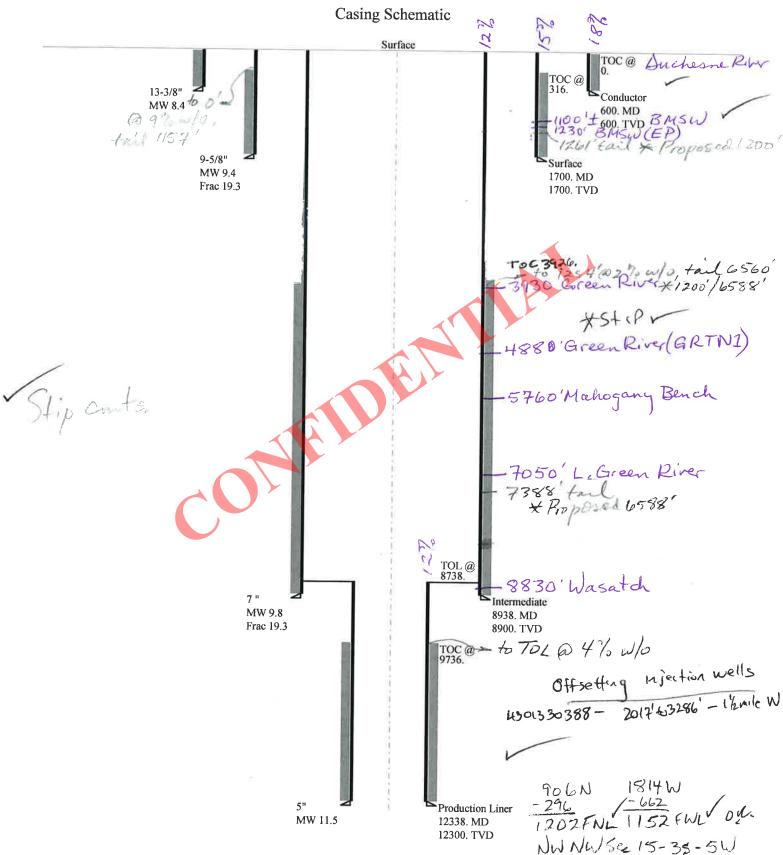
Calculations	COND String	13.375	"
Max BHP (psi)	.052*Setting Depth*MW=	275	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	203	YES 4.5 x 20 rotating head
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	143	YES OK
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP22*(Setting Depth - Previous Shoe Depth)=	143	NO OK
Required Casing/BOPE Tes	st Pressure=	600	pși
*Max Pressure Allowed @	Previous Casing Shoe=	0	psi *Assumes 1psi/ft frac gradient

Calculations	SURF String	1	9.625	"
Max BHP (psi)	.052*Setting Depth*MW=	831		
				BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	627		YES 4.5 x 13 3/8 rotating head
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	457		YES
				*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP22*(Setting Depth - Previous Shoe Depth)=	589		YES OK
Required Casing/BOPE Tes	st Pressure=	1700		psi
*Max Pressure Allowed @	Previ <mark>ou</mark> s Casing Shoe=	600		psi *Assumes 1psi/ft frac gradient

Calculations	I1 String	7.000	"
Max BHP (psi)	.052*Setting Depth*MW=	4555	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	3482	YES 5M BOP, two ram preventers, annular preventer, kill line,
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	2589	YES choke manifold
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP22*(Setting Depth - Previous Shoe Depth)=	2963	NO OK
Required Casing/BOPE Test Pressure=			psi
*Max Pressure Allowed @	Previous Casing Shoe=	1700	psi *Assumes 1psi/ft frac gradient

Calculations	L1 String	5.000	"		
Max BHP (psi)	.052*Setting Depth*MW=	7355			
			BOPE Adequate For Drilling And Setting Casing at Depth?		
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	5879	YES 10M BOPE w/rotating head, 5M annular, blind rams, flex ram		
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	4649	YES mud cross		
			*Can Full Expected Pressure Be Held At Previous Shoe?		
Pressure At Previous Shoe	Max BHP22*(Setting Depth - Previous Shoe Depth)=	6615	YES OK		
Required Casing/BOPE Test Pressure=			psi		
*Max Pressure Allowed @	Previous Casing Shoe=	8938	psi *Assumes 1psi/ft frac gradient		

43013528420000 Paulsen 2-15C5



Well name:

43013528420000 Paulsen 2-15C5

Operator:

EP ENERGY E&P COMPANY, LP.

String type:

Conductor

Design is based on evacuated pipe.

Project ID: 43-013-52842

Location:

Collapse

DUCHESNE COUNTY

Minimum design factors: **Environment:**

Collapse:

Design factor 1.125 H2S considered?

Surface temperature:

No 74 °F

Bottom hole temperature: Temperature gradient:

82 °F 1.40 °F/100ft

Minimum section length:

Non-directional string.

100 ft

Burst:

Design factor

1.00

Cement top:

Surface

Burst

Max anticipated surface

No backup mud specified.

pressure:

190 psi

8.400 ppg

Internal gradient: Calculated BHP

Design parameters:

Mud weight:

0.120 psi/ft

262 psi

Body yield:

1.70 (J) 1.60 (J)

1.50 (J) 1.50 (B)

1.80 (J)

Tension is based on buoyed weight. 525 ft

Tension:

8 Round STC: 8 Round LTC:

Buttress: Premium:

Neutral point:

Run Seq 1	Segment Length (ft) 600	Size (in) 13.375	Nominal Weight (Ibs/ft) 54.50	Grade J-55	End Finish ST&C	True Vert Depth (ft) 600	Measured Depth (ft) 600	Drift Diameter (in) 12.49	Est. Cost (\$) 7442	
Run Seq	Collapse Load (psi) 262	Collapse Strength (psi) 1130	Collapse Design Factor 4.317	Burst Load (psi) 262	Burst Strength (psi) 2730	Burst Design Factor 10.43	Tension Load (kips) 28.6	Tension Strength (kips) 514	Tension Design Factor 17.95 J	

Prepared

Helen Sadik-Macdonald

Div of Oil, Gas & Mining

Phone: 801 538-5357

FAX: 801-359-3940

Date: April 15,2014 Salt Lake City, Utah

Collapse is based on a vertical depth of 600 ft, a mud weight of 8.4 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

43013528420000 Paulsen 2-15C5 Well name:

Operator: EP ENERGY E&P COMPANY, LP.

String type: Surface

Project ID: 43-013-52842

Location: DUCHESNE COUNTY

Design is based on evacuated pipe.

Minimum design factors: **Environment:**

1.00

1.80 (J)

Collapse:

Design factor 1.125 H2S considered? Surface temperature:

No 74 °F

Bottom hole temperature: Temperature gradient:

98 °F 1.40 °F/100ft

Minimum section length:

100 ft

Burst:

Design factor

Cement top:

316 ft

Burst

Collapse

Max anticipated surface

No backup mud specified.

pressure: Internal gradient: Calculated BHP

Design parameters:

Mud weight:

1,496 psi 0.120 psi/ft

9.400 ppg

1,700 psi

Tension:

8 Round STC: 8 Round LTC:

1.70 (J) Buttress: 1.60 (J) 1.50 (J)

Premium: Body yield: 1.50 (B)

Tension is based on buoyed weight. Neutral point: 1,462 ft

Non-directional string.

Re subsequent strings:

Next setting depth: Next mud weight: Next setting BHP:

8,900 ft 9.800 ppg 4,531 psi 19.250 ppg

Fracture mud wt: Fracture depth: Injection pressure:

1,700 ft 1,700 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost
1	1700	9.625	40.00	N-80	LT&C	1700	1700	8.75	(\$) 21632
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength	Burst Design	Tension Load	Tension Strength	Tension Design
1	830	3090	3.722	1700	(psi) 5750	Factor 3.38	(kips) 58.5	(kips) 737	Factor 12.60 J

Prepared

Helen Sadik-Macdonald

Div of Oil, Gas & Mining

Phone: 801 538-5357 FAX: 801-359-3940

Date: April 15,2014 Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 1700 ft, a mud weight of 9.4 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Well name:

43013528420000 Paulsen 2-15C5

Operator:

EP ENERGY E&P COMPANY, LP.

String type:

Intermediate

Project ID:

43-013-52842

Location:

DUCHESNE COUNTY

Design para	meters:	

Collapse Mud weight:

9.800 ppg

Design is based on evacuated pipe.

Minimum design factors:

Collapse: Design factor

1.125

Environment:

H2S considered? Surface temperature:

No 74 °F

Bottom hole temperature: Temperature gradient:

199 °F 1.40 °F/100ft

Minimum section length: 1,000 ft

Burst:

Design factor

1.00

1.80 (J)

1.80 (J)

1.60 (J)

1.50 (J)

1.60 (B)

Cement top:

3,926 ft

1700 ft

Burst

Run

Seq

Max anticipated surface

Segment

Length

pressure: Internal gradient: 4,642 psi 0.220 psi/ft 6,600 psi

Nominal

Weight

Calculated BHP No backup mud specified.

Size

Tension: 8 Round STC:

8 Round LTC: Buttress:

Premium:

Body yield:

Grade

Tension is based on buoyed weight. Neutral point: 7.612 ft

End

Finish

Directional well information:

Kick-off point Departure at shoe:

725 ft Maximum dogleg: 1.5 °/100ft Inclination at shoe: 0°

Re subsequent strings:

Next setting depth: 12,300 ft Next mud weight: 11.500 ppg Next setting BHP: 7,348 psi Fracture mud wt: 19.250 ppg Fracture depth: 8,900 ft Injection pressure: 8,900 psi

True Vert Measured Drift Est. Depth Depth Diameter Cost (\$) (ft) (in)

1	(ft) 8938	(in) 7	(lbs/ft) 29.00	HCP-110	LT&C	(ft) 8900	(ft) 8938	(in) 6.059	(\$) 100933
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	4531	9200	2.030	6600	11220	1.70	219.8	797	3.63 J

Prepared

Helen Sadik-Macdonald

Div of Oil, Gas & Mining

Phone: 801 538-5357 FAX: 801-359-3940

Date: May 13,2014 Salt Lake City, Utah

Collapse is based on a vertical depth of 8900 ft, a mud weight of 9.8 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

Well name:

43013528420000 Paulsen 2-15C5

Operator:

EP ENERGY E&P COMPANY, LP.

String type:

Production Liner

Project ID:

43-013-52842

Location:

DUCHESNE COUNTY

Design parameters:

Collapse

Mud weight:

11.500 ppg Design is based on evacuated pipe.

Minimum design factors:

Collapse:

Design factor

1.125

Environment: H2S considered?

Surface temperature:

No 74 °F

Bottom hole temperature: 246 °F Temperature gradient:

1.40 °F/100ft

Minimum section length: 1,000 ft

Burst:

Design factor

1.00

Cement top:

9,736 ft

Burst

Max anticipated surface pressure:

Internal gradient: Calculated BHP

4,642 psi 0.220 psi/ft 7,348 psi

No backup mud specified.

Tension:

8 Round LTC: Buttress: Premium:

Body yield:

8 Round STC:

1.80 (J) 1.60 (J) 1.50 (J)

1.60 (B)

1.80 (J)

Liner top:

8,738 ft Directional Info - Build & Drop

Kick-off point 1700 ft Departure at shoe: 725 ft Maximum dogleg: 1.5 °/100ft

0° Inclination at shoe:

Tension is based on buoyed weight. Neutral point: 11,701 ft

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	3638	5	18.00	HCP-110	ST-L	12300	12338	4.151	288130
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	7348	15360	2.090	7348	13940	1.90	54	341	6.31 J

Prepared

Helen Sadik-Macdonald

Div of Oil, Gas & Mining

Phone: 801 538-5357 FAX: 801-359-3940

Date: April 15,2014 Salt Lake City, Utah

Remarks:

For this liner string, the top is rounded to the nearest 100 ft.Collapse is based on a vertical depth of 12300 ft, a mud weight of 11.5 ppg. The Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

ON-SITE PREDRILL EVALUATION

Utah Division of Oil, Gas and Mining

Operator EP ENERGY E&P COMPANY, L.P.

Well Name Paulsen 2-15C5

API Number 43013528420000 APD No 9380 Field/Unit ALTAMONT

Location: 1/4,1/4 NENW **Sec** 15 **Tw** 3.0S **Rng** 5.0W 906 FNL 1814 FWL **GPS Coord (UTM)** 547696 4452875 **Surface Owner** Paulsen Family Trust

Participants

Jared Thacker (EP energy); Heather Ivie (Land Man); Dennis Ingram (DOGM)

Regional/Local Setting & Topography

The Paulsen 2-15C5 is proposed in northeastern Utah approximately 4.00 miles north of Duchesne by turning off US Highway 40 onto 700 West for 3.74 miles along a gravel road, then west for another 0.97 miles where the new access road will lead into the location. To the north, much of this surface is bench-like habitat in sagebrush and juniper landscape. To the west, a deep, rocky canyon drains the country southerly into the northern portion of Starvation Reservoir. The reservoir is located approximately a thousand feet from this proposed pad. The immediate surface topography at the pad slopes northwest and has shallow washes that drain storm or run off waters into the canyon west of the pad. The surface vegetation is either pinion juniper, mountain mahogany, rabbit or sagebrush with large sandstone rocks along the surface.

Surface Use Plan

Current Surface Use

Recreational

Deer Winter Range

New Road
Miles

Src Const Material Surface Formation

0.25 Width 282 Length 425 Onsite UNTA

Ancillary Facilities N

Closed loop mud system

Waste Management Plan Adequate?

Environmental Parameters

Affected Floodplains and/or Wetlands N

Flora / Fauna

Pinion Juniper, mountain mahogany, prickly pear cactus; mule deer, elk, mountain lion, coyote, raccoon, rabbit, smaller mammals native to region in lake.

Soil Type and Characteristics

Reddish, brown sandy loam with some clays and underlying sandstone

Erosion Issues Y

Sedimentation Issues Y

RECEIVED: May 14, 2014

API Well Number: 43013528420000

Site Stability Issues N

Drainage Diverson Required? Y

Tie back into existing washes

Berm Required? Y

Permanent type berming along the western side of location where sandstone ledges break into a drainage toward lake

Erosion Sedimentation Control Required? N

Paleo Survey Run? N Paleo Potental Observed? N Cultural Survey Run? N Cultural Resources? N

Reserve Pit

rve Fit			
Site-Specific Factors	Site Ra	anking	
Distance to Groundwater (feet)	25 to 75	15	
Distance to Surface Water (feet)	300 to 1000	2	
Dist. Nearest Municipal Well (ft)	500 to 1320	10	
Distance to Other Wells (feet)	>1320	0	
Native Soil Type	High permeability	20	
Fluid Type	Fresh Water	5	
Drill Cuttings	Normal Rock	0	
Annual Precipitation (inches)		0	
Affected Populations	> 50	> 50	
Presence Nearby Utility Conduits	Not Present	0	
	Final Score	62	1 Sensitivity Level

Characteristics / Requirements

Closed loop mud system required because of sandstone at surface and the need for blasting to construct pit, also because of Starvation Reservoir and the drainage to the west of the location.

Closed Loop Mud Required? Y Liner Required? Liner Thickness Pit Underlayment Required?

Other Observations / Comments

Surface owner did not attend, adjacent rocky canyon west of proposed reserve pit and location, sandstone rock at surface in pit area would require blasting to construct, spring water coming from hillside to the west, closed loop mud system required, special berming required along western side of location to prevent spills or leaks from entering same. Also stopped by the Central Utah Water Conservancy District in Duchesne and left a plate showing the proposed disturbance as they have requested in the past; also got them into our website and showed them on the topography map where this well plots up.

Dennis Ingram 3/6/2014 **Evaluator** Date / Time

RECEIVED: May 14, 2014

API Well Number: 43013528420000

Application for Permit to Drill Statement of Basis

Utah Division of Oil, Gas and Mining

APD No	API WellNo	Status	Well Type	Surf Owner	CBM			
9380	43013528420000	LOCKED	OW	P	No			
Operator	EP ENERGY E&P COMPANY	, L.P.	Surface Owner-APD	Paulsen Family Trust				
Well Name	Paulsen 2-15C5		Unit					
Field	ALTAMONT		Type of Work	DRILL				
Location	NENW 15 3S 5W U	906 FNL	1814 FWL GPS Coord	l				
Location	(UTM) 547692E 445283	59N						

Geologic Statement of Basis

EP proposes to set 600 feet of conductor and 1,700 feet of surface casing both of which will be cemented to surface. The surface hole will be drilled utilizing fresh water mud. The estimated depth to the base of moderately saline ground water is 1,100 feet. A search of Division of Water Rights records indicates that there are 24 water wells within a 10,000 foot radius of the center of Section 15. These wells range in depth from 35-440 feet. Wells in this area produce water from the Duchesne River Formation and alluvium derived from the Duchesne River Formation The wells are listed as being used for irrigation, stock watering, municipal, oil exploration and domestic. The proposed drilling, casing and cement program should adequately protect usable ground water in this area.

Brad Hill

APD Evaluator

3/19/2014 **Date / Time**

Surface Statement of Basis

Surface area and well staking in juniper trees with large sandstone surface covering much of where the proposed reserve pit is staked. Adjacent canyon leads approximately a thousand feet to the lake, spring water was observed west of the location coming from adjacent sandstone outcroppings. It has been determined that blasting would be required to construct a reserve pit; therefore, a closed loop mud system shall be required because of the potential of fractured rocks and spring, ground, or lake water contamination. A permanent berm should also be constructed along the west side or that overlooking the canyon that drains into the Starvation Reservoir. Existing drainages shall also be diverted to limit erosion.

A presite was scheduled and performed on the Paulsen 2-15C5 to take input and address issues regarding the construction and drilling of this well. The landowner of record was contacted and invited to the presite. EP Energy has submitted documentation to the Division stating they have a signed landowner or surface disturbance agreement. A visit to the Central Utah Water Conservancy District Office was made to review this well site and future plans. Once again that group expressed concerns about keeping oil or any drilling fluids away from the Reservoir. The closed loop mud system and permanent type berming was stipulated to assure water quality in that reservoir.

Dennis Ingram
Onsite Evaluator

3/6/2014 **Date / Time**

Conditions of Approval / Application for Permit to Drill

RECEIVED: May 14, 2014

Category	Condition
Pits	A closed loop mud circulation system is required for this location.
Surface	The well site shall be bermed to prevent fluids from entering or leaving the pad. Berming on the lake side of the pad shall have permanent type berming around the western sides to prevent spills or leaks from leaving well site and flowing into broken, sandstone draw canyon that drains toward and into Starvation Reservoir.
Surface	Drainages adjacent to the proposed pad shall be diverted around the location.



API Well Number: 43013528420000

WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 2/5/2014	API NO. ASSIGNED: 43013528420000

WELL NAME: Paulsen 2-15C5

OPERATOR: EP ENERGY E&P COMPANY, L.P. (N3850) PHONE NUMBER: 713 997-5038

CONTACT: Maria S. Gomez

PROPOSED LOCATION: NENW 15 030S 050W Permit Tech Review:

> **SURFACE: 0906 FNL 1814 FWL Engineering Review:**

> Geology Review: **BOTTOM:** 1200 FNL 1150 FWL

> **COUNTY: DUCHESNE**

LATITUDE: 40.22480 LÓNGITUDE: -110.43944 UTM SURF EASTINGS: 547692.00 NORTHINGS: 4452859.00

FIELD NAME: ALTAMONT LEASE TYPE: 4 - Fee

> **LEASE NUMBER:** Fee PROPOSED PRODUCING FORMATION(S): GREEN RIVER(LWR)-WASATCH

> SURFACE OWNER: 4 - Fee **COALBED METHANE: NO**

> > Unit:

LOCATION AND SITING:

RECEIVED AND/OR REVIEWED:

Bond: STATE - 400JU0708

✓ PLAT R649-2-3.

Potash R649-3-2. General

Oil Shale 190-5

Oil Shale 190-3 R649-3-3. Exception

Drilling Unit Oil Shale 190-13

Board Cause No: Cause 139-85 Water Permit: Duchesne City

Effective Date: 3/11/2010 **RDCC Review:**

Siting: 4 Wells Per 640 Acre **Fee Surface Agreement**

Intent to Commingle R649-3-11. Directional Drill

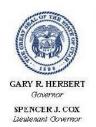
Commingling Approved

Comments: Presite Completed

Stipulations: 5 - Statement of Basis - bhill

8 - Cement to Surface -- 2 strings - hmacdonald 13 - Cement Volume Formation (3a) - hmacdonald

15 - Directional - dmason



State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

Permit To Drill

Well Name: Paulsen 2-15C5 API Well Number: 43013528420000

Lease Number: Fee

Surface Owner: FEE (PRIVATE) **Approval Date:** 5/14/2014

Issued to:

EP ENERGY E&P COMPANY, L.P., 1001 Louisiana, Houston, TX 77002

Authority:

Pursuant to Utah Code Ann. 40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of Cause 139-85. The expected producing formation or pool is the GREEN RIVER(LWR)-WASATCH Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

Duration:

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

General:

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

Conditions of Approval:

In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis (copy attached).

Cement volumes for the 13 3/8" and 9 5/8" casing strings shall be determined from actual hole diameters in order to place cement from the pipe setting depths back to the surface.

Cement volume for the 7" intermediate string shall be determined from actual hole diameter in order to place lead cement from the pipe setting depth back to 1200' MD and tail to 500' above the lower Green River.

Additional Approvals:

The operator is required to obtain approval from the Division of Oil, Gas and mining before performing any of the following actions during the drilling of this well:

- Any changes to the approved drilling plan contact Dustin Doucet
- Significant plug back of the well contact Dustin Doucet
- Plug and abandonment of the well contact Dustin Doucet

Notification Requirements:

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

• Within 24 hours following the spudding of the well - contact Carol Daniels OR

submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website

- at http://oilgas.ogm.utah.gov
- 24 hours prior to testing blowout prevention equipment contact Dan Jarvis
- 24 hours prior to cementing or testing casing contact Dan Jarvis
- Within 24 hours of making any emergency changes to the approved drilling program
 - contact Dustin Doucet
- 24 hours prior to commencing operations to plug and abandon the well contact Dan Jarvis

Contact Information:

The following are Division of Oil, Gas and Mining contacts and their telephone numbers (please leave a voicemail message if the person is not available to take the call):

- Carol Daniels 801-538-5284 office
- Dustin Doucet 801-538-5281 office

801-733-0983 - after office hours

• Dan Jarvis 801-538-5338 - office

801-231-8956 - after office hours

Reporting Requirements:

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) due within 5 days of spudding the well
- Monthly Status Report (Form 9) due by 5th day of the following calendar month
 - Requests to Change Plans (Form 9) due prior to implementation
 - Written Notice of Emergency Changes (Form 9) due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) due prior to implementation
 - Report of Water Encountered (Form 7) due within 30 days after completion
- Well Completion Report (Form 8) due within 30 days after completion or plugging

Approved by:

For John Rogers Associate Director, Oil & Gas



Alexis Huefner <alexishuefner@utah.gov>

spud date

1 message

RLANDRIG008 < RLANDRIG008@epenergy.com>

Mon, Jun 30, 2014 at 9:06 PM

To: Alexis Huefner <alexishuefner@utah.gov>, "MacAfee, Bradley D" <Brad.MacAfee@epenergy.com>, Carol Daniels <caroldaniels@utah.org>, "dennisingram@utah.gov" <dennisingram@utah.gov>, "Morales, Lisa" <Lisa.Morales@epenergy.com>, "Gomez, Maria S" <Maria.Gomez@epenergy.com>, "Evans, Perry (Contractor)" <Perry.Evans@epenergy.com>, "Ward, Julia A (Julie)" <Julie.Ward@epenergy.com>

We will be spud the Paulsen 2-15C5 on 7/01/2014.

4301352842 906 FNL 1814 FWL

NENW 15385W

Thanks

Kenneth SWILLEY



THIS E-MAIL AND ANY MATERIALS TRANSMITTED WITH IT MAY CONTAIN CONFIDENTIAL OR PROPRIETARY MATERIAL FOR THE SOLE USE OF THE INTENDED RECIPIENT. ANY REVIEW, USE, DISTRIBUTION OR DISCLOSURE BY OTHERS IS STRICTLY PROHIBITED. IF YOU ARE NOT THE INTENDED RECIPIENT, OR AUTHORIZED TO RECEIVE THE INFORMATION FROM THE RECIPIENT, PLEASE NOTIFY THE SENDER BY REPLY E-MAIL AND DELETE ALL COPIES OF THIS MESSAGE.

	STATE OF UTAH		FORM 9				
ı	DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	3	5.LEASE DESIGNATION AND SERIAL NUMBER: Fee				
SUNDR	Y NOTICES AND REPORTS ON	WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:				
Do not use this form for pro current bottom-hole depth, FOR PERMIT TO DRILL form	posals to drill new wells, significantly deep reenter plugged wells, or to drill horizontal I n for such proposals.	en existing wells below aterals. Use APPLICATION	7.UNIT or CA AGREEMENT NAME:				
1. TYPE OF WELL Oil Well			8. WELL NAME and NUMBER: Paulsen 2-15C5				
2. NAME OF OPERATOR: EP ENERGY E&P COMPANY,	L.P.		9. API NUMBER: 43013528420000				
3. ADDRESS OF OPERATOR: 1001 Louisiana , Houston,		NE NUMBER: Ext	9. FIELD and POOL or WILDCAT: ALTAMONT				
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0906 FNL 1814 FWL			COUNTY: DUCHESNE				
QTR/QTR, SECTION, TOWNSH Qtr/Qtr: NENW Section:	IIP, RANGE, MERIDIAN: 15 Township: 03.0S Range: 05.0W Meridian	: U	STATE: UTAH				
11. CHEC	K APPROPRIATE BOXES TO INDICATE N.	ATURE OF NOTICE, REPOR	T, OR OTHER DATA				
TYPE OF SUBMISSION		TYPE OF ACTION					
l .	CHANGE TO PREVIOUS PLANS CHANGE WELL STATUS DEEPEN OPERATOR CHANGE PRODUCTION START OR RESUME REPERFORATE CURRENT FORMATION TUBING REPAIR WATER SHUTOFF		CASING REPAIR CHANGE WELL NAME CONVERT WELL TYPE NEW CONSTRUCTION PLUG BACK RECOMPLETE DIFFERENT FORMATION TEMPORARY ABANDON WATER DISPOSAL APD EXTENSION OTHER: Initial Completion epths, volumes, etc. Approved by the Utabusivisto 20f4 Oil, Gas and Mining Date: By:				
NAME (PLEASE PRINT)	PHONE NUMBER	TITLE					
Maria S. Gomez	713 997-5038	Principal Regulatory Analys	t				
SIGNATURE N/A		DATE 8/12/2014					

Paulsen 2-15C5

Initial Completion

API#: 43013528420000

The following precautions will be taken until the RCA for the Conover is completed:

- 1. Review torque turning and running of the 7" and 5" liner of anomalies.
- **2.** Test and chart casing for 30 minutes, noting pressure if any on surface casing.
- **3.** Test all lubricators, valves and BOP's to working pressure.
- **4.** Wellhead isolation tools will continue to be used to isolate the wellhead during the frac.
- **5**. Monitor the surface casing during frac:
 - **a.** Lay a flowline to the flow back tank and keep the valve open.
 - **b.** This line will remain in place until a wire line set retrievable packer is in place isolating the 5" casing from the 7" after the frac.
- **6**. 2 7/8" tubing will be run to isolate the 7" casing during the flow back of the well.
- 7. Well pressure and annulus pressure would be monitored during this time until the well is ready for pump.

~9816' - 10074' with ~5000 gallons of 15% HCL acid, ~3000 # of 100 mesh sand and

Completion Information (Wasatch Formation)

Stage #1	RU WL unit with 10K lubricator and test to 10,000 psi with glycol. Perforations from ~11194' – 11493' with ~5000 gallons of 15% HCL acid, ~3000 # of 100 mesh sand and ~145000 # of Power Prop 20/40. Total clean water volume is 122199 gals.
Stage #2	RU WL unit with 10K lubricator and test to 10,000 psi with glycol. Perforations from $^{\sim}10848'-11164'$ with $^{\sim}5000$ gallons of 15% HCL acid, $^{\sim}3000$ # of 100 mesh sand and $^{\sim}155000$ # of Power Prop 20/40. Total clean water volume is 128300 gals.
Stage #3	RU WL unit with 10K lubricator and test to 10,000 psi with glycol. Perforations from $^{\sim}10499'-10814'$ with $^{\sim}5000$ gallons of 15% HCL acid, $^{\sim}3000$ # of 100 mesh sand and $^{\sim}145000$ # of Power Prop 20/40. Total clean water volume is 121162 gals.
Stage #4	RU WL unit with 10K lubricator and test to 10,000 psi with glycol. Perforations from $^{\sim}10137'-10462'$ with $^{\sim}5000$ gallons of 15% HCL acid, $^{\sim}3000$ # of 100 mesh sand and $^{\sim}150000$ # of TLC 30/50. Total clean water volume is 168130 gals.
Stage #5	RU WL unit with 10K lubricator and test to 10,000 psi with glycol. Perforations from

~140000 # of TLC 30/50. Total clean water volume is 158558 gals.

RU WL unit with 10K lubricator and test to 10,000 psi with glycol. Perforations from Stage #6 $^{\sim}9513' - 9783'$ with $^{\sim}5000$ gallons of 15% HCL acid, $^{\sim}3000$ # of 100 mesh sand and ~140000 # of TLC 30/50. Total clean water volume is 156331 gals.

Stage #7 RU WL unit with 10K lubricator and test to 10,000 psi with glycol. Perforations from ~9209' - 9480' with ~5000 gallons of 15% HCL acid, ~3000 # of 100 mesh sand and

~150000 # of TLC 30/50. Total clean water volume is 164438 gals.

Stage #8 RU WL unit with 10K lubricator and test to 10,000 psi with glycol. Perforations from ~8945' - 9182' with ~5000 gallons of 15% HCL acid, ~3000 # of 100 mesh sand and

~130000 # of TLC 30/50. Total clean water volume is 147574 gals.

Stimulation Summary

	Top Perf	Btm. Perf	Gross Interval	Plug Depth	Net Perf Length	Total Shots	Perf Type of Prop		Lbs of Prop	Lbs/ft	Lbs of 100 Mesh	Gals of HCL (15%)	Gals of Clean H2O	Gals of Slurry
Stage #1	11,194	11,493	299	NA	23	69	17	Power Prop 20/40	145,000	485	3,000	5,000	122,199	138,352
Stage #2	10,848	11,164	316	11,174	23	69	17	Power Prop 20/40	155,000	491	3,000	5,000	128,300	145,206
Stage #3	10,499	10,814	315	10,824	23	69	17	Power Prop 20/40	145,000	460	3,000	5,000	121,162	137,315
Stage #4	10,137	10,462	325	10,472	23	69	16	16 TLC 30/50		462	3,000	5,000	168,130	189,954
Stage #5	9,816	10,074	258	10,084	22	66	16	TLC 30/50	140,000	543	3,000	5,000	158,558	179,609
Stage #6	9,513	9,783	270	9,793	23	69	17	TLC 30/50	140,000	519	3,000	5,000	156,331	177,382
Stage #7	9,209	9,480	271	9,490	23	69	17	TLC 30/50	150,000	554	3,000	5,000	164,438	186,262
Stage #8	8,945	9,182	237	9,192	23	69	17	TLC 30/50	130,000	549	3,000	5,000	147,574	167,853
Average p	er Stage		286		23	69	17		144,375	508	3,000	5,000	145,837	165,242
Totals per			2,291		183	549	134		1,155,000		24,000	40,000	1,166,692	1,321,934



Pre-Completion Wellbore Schematic

Well Name: Paulsen 2-15C5

Company Name: EP Energy

Field, County, State: Altamont, Duchesne, UT

Surface Location: Lat: 40°13'29.635" N Long: 110°26'21.721" W

Producing Zone(s): Wasatch

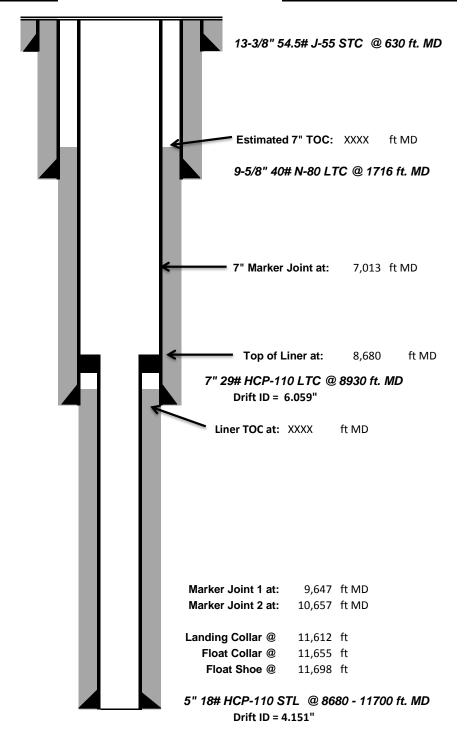
 By:
 Jarrod Kent

 TD:
 11,655

 API:
 43013528420000

 AFE:
 159887

8.43 ppg KCL substitute (Clay Webb Water) water in the wellbore



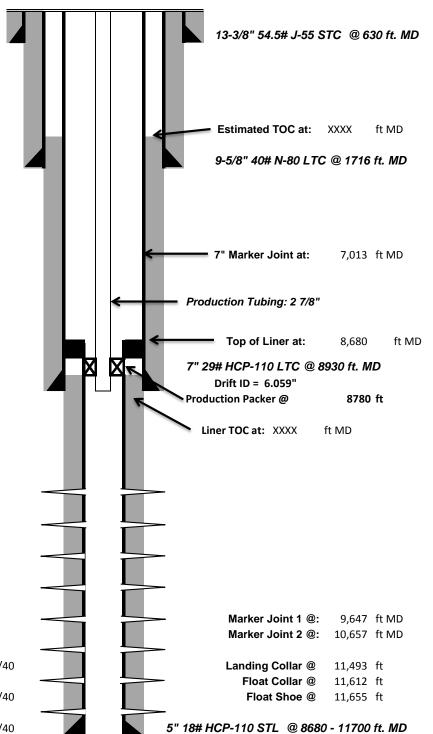


Post-Completion Wellbore Schematic

Well Name: Paulsen 2-15C5 Company Name: EP Energy Field, County, State: Altamont, Duchesne, UT Surface Location: Lat: 40°13'29.635" N Long: 110°26'21.721" W Producing Zone(s): Wasatch

Last Updated:	8/12/2014
Ву:	Jarrod Kent
TD:	11,655
API:	43013528420000
AFE:	159887

8.43 ppg KCL substitute (Clay Webb Water) water in the wellbore



23' /69 shots

Initial Completion Perf Information

5000 gal HCL & 130000 lbs TLC 30/50

Stage #8 8945 - 9182

Stage #4 10137 - 10462 23' /69 shots

5000 gal HCL & 150000 lbs TLC 30/50 Stage #3 10499 - 10814 23' /69 shots

5000 gal HCL & 145000 lbs Power Prop 20/40

Stage #2 10848 - 11164 23' /69 shots 5000 gal HCL & 155000 lbs Power Prop 20/40

Stage #1 11194 - 11493 23' /69 shots 5000 gal HCL & 145000 lbs Power Prop 20/40

Drift ID = 4.151"

			DEPA		TATE (OURCES	6					IDED RI	EPORT inges)	FOR	RM 8
			DIVIS	ION O	F OIL,	GAS	AND	MININ	G				5. LEAS	SE DESIGN	NATION AND SE	RIAL NUMBE	R:
WELI	L CON	IPLE	TION	OR I	RECC	MPL	ETIC	ON RI	EPOR	T ANI	D LOG		6. IF IN	DIAN, ALL	OTTEE OR TRIE	BE NAME	
1a. TYPE OF WELL:	:	(OIL C		GAS WELL		DRY		OTHE	R			7. UNIT	or CA AG	REEMENT NAM	E	
b. TYPE OF WORK	(: HORIZ. LATS.	7	DEEP-	7	RE- ENTRY		DIFF. RESVR.	П	OTHE	R			8. WEL	L NAME ar	nd NUMBER:		
2. NAME OF OPERA										· ·			9. APIN	IUMBER:			
3. ADDRESS OF OP	PERATOR:		CITY			STATE		ZIP		PHONE	E NUMBER:		10 FIEL	D AND PO	OOL, OR WILDC	AT	
4. LOCATION OF WI	ELL (FOOT		0111			OTATE	•	ZII		<u> </u>			11. QTF MEI	R/QTR, SE RIDIAN:	CTION, TOWNS	HIP, RANGE	
AT TOP PRODUC	CING INTER	VAL REPO	ORTED BE	ELOW:								_					
AT TOTAL DEPTI	H:												12. CO	JNTY	1	3. STATE U	JTAH
14. DATE SPUDDED	D:	15. DATE	T.D. REA	CHED:	16. DAT	E COMPL	ETED:	,	ABANDONE	D 🗌	READY TO PR	ODUCE		. ELEVAT	IONS (DF, RKB,	RT, GL):	
18. TOTAL DEPTH:	MD TVD			19. PLUG	BACK T.E	D.: MD TVD			20. IF M	ULTIPLE C	OMPLETIONS, I	HOW MAN	Y? * 21	DEPTH I			
22. TYPE ELECTRIC	C AND OTHE	ER MECHA	NICAL LO	OGS RUN (Submit cop	py of each)			WAS DST	LL CORED? RUN? DNAL SURVEY?		NO NO	YES YES YES	(Subn	nit analysis) nit report) nit copy)	
24. CASING AND LI	NER RECO	RD (Repor	t all string	gs set in w	rell)		ı		1			Ŧ		1		1	
HOLE SIZE	SIZE/GF	RADE	WEIGH	T (#/ft.)	TOP	(MD)	вотто	OM (MD)		EMENTER PTH	CEMENT TYF NO. OF SAC		SLURRY DLUME (E		EMENT TOP **	AMOUNT F	PULLED
25. TUBING RECOR	RD.																
SIZE	DEPTH	I SET (MD)	PACI	KER SET (MD)	SIZE		DEPTH	SET (MD)	PACKE	R SET (MD)	SIZ	ΖE	DEPT	TH SET (MD)	PACKER SE	T (MD)
26. PRODUCING INT	TERVALS							<u> </u>		27. PERFO	RATION RECO	RD					
FORMATION	NAME	TO	P (MD)	BOTTO	OM (MD)	TOP	(TVD)	вотто	M (TVD)	INTERV	AL (Top/Bot - MD	D) SI	ZE NO). HOLES	PERFOR	ATION STAT	US
(A)															Open	Squeezed	
(B)															Open	Squeezed	
(C)															Open	Squeezed	$\overline{}$
(D)															Open	Squeezed	-
28. ACID, FRACTUR	RE. TREATM	MENT. CEN	MENT SQL	JEEZE. ET	c. See	at	tach	ied f	or f	urth	er info	orma	tion	on	#27 &	#28.	
	NTERVAL		T T	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0						TYPE OF MATE						
29. ENCLOSED ATT	FACHMENT:	s: All	l 10	gs a	re s	ubmi	tte	d to	UDO	GM by	vendo	r.			30. WEL	STATUS:	
\equiv	RICAL/MECI			O CEMENT	Γ VERIFIC <i>i</i>	ATION		GEOLOG CORE AN	C REPORT		DST REPORT OTHER:		DIRECTIO	NAL SUR	VEY		

(CONTINUED ON BACK)

(5/2000)

31. INITIAL PRO	ODUCTION				INT	ERVAL A (As sho	wn in item #26)						
DATE FIRST PR	ODUCED:	TEST DATE	≣:		HOURS TESTED):	TEST PRODUCTION RATES: →	OIL – E	BBL:	GAS - MCF:	WATER – B	BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRES	SS. API GR.	AVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	N OIL – E	BBL:	GAS – MCF:	WATER – B	BBL:	INTERVAL STATUS:
	<u> </u>		I.		INT	ERVAL B (As sho	wn in item #26)			I.			•
DATE FIRST PR	ODUCED:	TEST DATE	≣:		HOURS TESTED):	TEST PRODUCTION RATES: →	OIL – E	BBL:	GAS – MCF:	WATER – B	BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRES	SS. API GR.	AVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	N OIL – E	BBL:	GAS - MCF:	WATER – B	BBL:	INTERVAL STATUS:
			-		INT	ERVAL C (As sho	wn in item #26)				-		
DATE FIRST PR	ODUCED:	TEST DATE	= :		HOURS TESTED):	TEST PRODUCTION RATES: →	OIL – E	BBL:	GAS - MCF:	WATER – B	BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRES	SS. API GR.	AVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	N OIL – E	BBL:	GAS - MCF:	WATER – B	BBL:	INTERVAL STATUS:
		·	I.		INT	ERVAL D (As sho	wn in item #26)						•
DATE FIRST PR	ODUCED:	TEST DATE	≣:		HOURS TESTED):	TEST PRODUCTION RATES: →	OIL – E	BBL:	GAS – MCF:	WATER – B	BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRES	SS. API GR.	AVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	N OIL – E	BBL:	GAS – MCF:	WATER – B	BBL:	INTERVAL STATUS:
32. DISPOSITIO	ON OF GAS (Solo	l, Used for Fue	el, Vented, Etc	:.)	•	•				•	•		
33. SUMMARY	OF POROUS ZO	NES (Include /	Aquifers):				;	34. FORM	MATION (Le	og) MARKERS:			
	int zones of poros used, time tool op					n tests, including de	epth interval						
Formatio	on	Top (MD)	Bottom (MD)		Descript	tions, Contents, etc	.			Name		1)	Top Measured Depth)
35. ADDITIONA	L REMARKS (Inc	lude plugging	g procedure)										
	•		,										
36. I hereby cer	rtify that the fore	going and atta	ached informa	ntion is co	omplete and corre	ect as determined	from all available red	cords.					
NAME (PLEAS	SE PRINT)						TITLE						
SIGNATURE _							DATE						

This report must be submitted within 30 days of

- completing or plugging a new well
- drilling horizontal laterals from an existing well bore
- recompleting to a different producing formation
- reentering a previously plugged and abandoned well
- significantly deepening an existing well bore below the previous bottom-hole depth
- drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests

** ITEM 24: Cement Top - Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

Send to: Utah Division of Oil, Gas and Mining

1594 West North Temple, Suite 1210

Box 145801

Salt Lake City, Utah 84114-5801

Phone: 801-538-5340

Fax: 801-359-3940

^{*} ITEM 20: Show the number of completions if production is measured separately from two or more formations.

Attachment to Well Completion Report

Form 8 Dated September 20, 2014

Well Name: Paulsen 2-15C5

Items #27 and #28 Continued

27. Perforation Record

Interval (Top/Bottom – MD)	Size	No. of Holes	Perf. Status
9813'-10073'	.43	69	Open
9510'-9781'	.43	69	Open
9205'-9477'	.43	69	Open
8940'-9179'	.43	69	Open

28. Acid, Fracture, Treatment, Cement Squeeze, Etc.

Depth Interval	Amount and Type of Material
10131'-10460'	5000 gal acid, 3000# 100 mesh, 150000# 30/50 TLC
9813'-10073'	5000 gal acid, 3000# 100 mesh, 140000# 30/50 TLC
9510'-9781'	5000 gal acid, 3000# 100 mesh, 133000# 30/50 TLC
9205'-9477'	5000 gal acid, 3000# 100 mesh, 155000# 30/50 TLC
8940'-9179'	5000 gal acid, 3000# 100 mesh, 131580# 30/50 TLC

EP ENERGY*

EP Energy Calculation Method Minimum Curvature Company: Job Number: Paulsen 2-15C5 0.00 KB Well: Mag Decl.: **Proposed Azimuth** Duchesne, UT Location: Dir Driller: **Depth Reference** Rig: Precision 404 MWD Eng: Tie Into: Gyro/MWD

Survey	Survey	Inclina-	1	Course	True Vertical	Vertical	Ι (Coord	inates	I	Clos	uro	Dogleg	Build	Walk
Number	Depth	tion	Azimuth	Length	Depth	Section	N/S		E/W			Direction		Rate	Rate
Number	(ft)	(deg)	(deg)	(ft)	(ft)	(ft)	(ft)		(ft)		(ft)	Azimuth	,	(d/100')	(d/100')
	(11)	(ueg)	(deg)	(11)	(11)	(11)	(11)		(11)		(11)	AZIIIIUIII	(d/100)	(d/100)	(d/100)
Tie In	0.00	0.00	0.00		I										
1	100.00	0.18	93.00	100.00	100.00	-0.01	0.01	S	0.16	Е	0.16	93.00	0.18	0.18	93.00
2	200.00	0.10	182.81	100.00	200.00	-0.01	0.01	S	0.10	E	0.10	108.64	0.18	-0.08	89.81
3	300.00	0.10	159.53	100.00	300.00	-0.11	0.11	S	0.34	E	0.35	129.96	0.05	0.01	-23.28
4	400.00	0.17	282.94	100.00	400.00	-0.25	0.25	S	0.23	E	0.43	146.36	0.05	0.06	123.41
5	500.00	0.17	297.77	100.00	500.00	-0.33	0.33	S	0.23	E	0.42	173.32	0.23	-0.11	14.82
6	600.00	0.07	280.63	100.00	600.00	-0.23	0.23	S		W	0.29	216.46	0.11	0.12	-17.13
7	700.00	0.18	181.17	100.00	700.00	-0.36	0.36	S		W	0.49	222.63	0.12	0.00	-99.46
8	800.00	0.25	286.62	100.00	800.00	-0.45	0.45	S		W	0.70	230.54	0.35	0.08	105.45
9	900.00	0.30	205.19	100.00	900.00	-0.62	0.62	S		W	1.07	234.42	0.36	0.05	-81.43
10	1000.00	0.23	247.04	100.00	1000.00	-0.93	0.93	S		W	1.49	231.21	0.20	-0.07	41.85
11	1100.00	0.16	258.82	100.00	1100.00	-1.04	1.04	S		W	1.81	235.01	0.08	-0.07	11.78
12	1200.00	0.49	309.71	100.00	1199.99	-0.80	0.80	S		W	2.11	247.81	0.40	0.33	50.89
13	1300.00	0.57	313.83	100.00	1299.99	-0.18	0.18	S		W	2.64	266.03	0.09	0.08	4.13
14	1400.00	0.63	314.12	100.00	1399.98	0.54	0.54	N		W	3.43	279.05	0.06	0.06	0.28
15	1500.00	0.66	322.23	100.00	1499.98	1.37	1.37	N		W	4.35	288.39	0.10	0.03	8.11
16	1600.00	0.55	317.95	100.00	1599.97	2.18	2.18	N		W	5.27	294.44	0.12	-0.11	-4.27
17	1650.00	0.49	306.97	50.00	1649.97	2.49	2.49	Ν		W	5.70	295.86	0.23	-0.12	-21.97
18	1733.00	0.48	315.34	83.00	1732.97	2.95	2.95	Ν		W	6.38	297.51	0.09	-0.01	10.09
19	1826.00	1.76	268.52	93.00	1825.95	3.19	3.19	Ν	7.36	W	8.02	293.42	1.58	1.38	-50.34
20	1919.00	3.92	279.94	93.00	1918.83	3.70	3.70	N	11.92	W	12.48	287.24	2.39	2.32	12.28
21	2012.00	5.93	280.39	93.00	2011.48	5.11	5.11	N	19.77	W	20.42	284.50	2.16	2.16	0.48
22	2105.00	5.84	277.58	93.00	2103.99	6.60	6.60	Ν	29.19	W	29.93	282.75	0.32	-0.10	-3.02
23	2198.00	5.46	275.85	93.00	2196.54	7.68	7.68	Ν	38.28	W	39.04	281.34	0.45	-0.41	-1.86
24	2291.00	7.10	275.39	93.00	2288.98	8.67	8.67	N	48.41	W	49.18	280.15	1.76	1.76	-0.49
25	2384.00	7.48	271.39	93.00	2381.23	9.36	9.36	N	60.18	W	60.90	278.84	0.68	0.41	-4.30
26	2476.00	7.58	270.74	92.00	2472.43	9.58	9.58	N		W	72.87	277.56	0.14	0.11	-0.71
27	2569.00	7.23	267.47	93.00	2564.66	9.40	9.40	N		W	84.74	276.37	0.59	-0.38	-3.52
28	2662.00	5.67	260.48	93.00	2657.07	8.38	8.38	N		W	94.96	275.06	1.87	-1.68	-7.52
29	2755.00	6.88	253.59	93.00	2749.51	6.05	6.05	N		W	104.64	273.31	1.53	1.30	-7.41
30	2848.00	7.89	253.09	93.00	2841.74	2.62	2.62	N		W	115.95	271.29	1.09	1.09	-0.54
31	2941.00	7.29	248.24	93.00	2933.92	-1.43	1.43	S		W	127.51	269.36	0.94	-0.65	-5.22
32	3035.00	7.06	247.23	94.00	3027.19	-5.87	5.87	S		W	138.49	267.57	0.28	-0.24	-1.07
33	3128.00	6.44	245.02	93.00	3119.54	-10.29	10.29	S		W	148.72	266.03	0.72	-0.67	-2.38
34	3221.00	7.15	248.58	93.00	3211.89	-14.60	14.60	S		W	159.15	264.74	0.89	0.76	3.83
35	3315.00	6.40	244.22	94.00	3305.23	-19.02	19.02	S	168.65	W	169.72	263.57	0.97	-0.80	-4.64

RECEIVED: Sep. 20, 2014

EP ENERGY*

EP Energy Company: Job Number: Calculation Method Minimum Curvature Paulsen 2-15C5 0.00 KB Well: Mag Decl.: **Proposed Azimuth** Duchesne, UT Location: Dir Driller: **Depth Reference** Rig: Precision 404 MWD Eng: Tie Into: Gyro/MWD

Survey	Survey	Inclina-		Course	True Vertical	Vertical	(Coord	dinates		Clos	ure	Dogleg	Build	Walk
Number	Depth	tion	Azimuth	Length	Depth	Section	N/S		E/W		Distance	Direction	Severity	Rate	Rate
	(ft)	(deg)	(deg)	(ft)	(ft)	(ft)	(ft)		(ft)		(ft)	Azimuth	(d/100')	(d/100')	(d/100')
36	3408.00	7.11	246.51	93.00	3397.59	-23.57	23.57	S	178.59	W	180.14	262.48	0.82	0.76	2.46
37	3501.00	7.80	256.53	93.00	3489.80	-27.33	27.33	S	190.01	W	191.96	261.81	1.58	0.74	10.77
38	3594.00	6.59	252.45	93.00	3582.07	-30.41	30.41	S	201.23	W	203.52	261.41	1.41	-1.30	-4.39
39	3687.00	5.71	245.23	93.00	3674.54	-33.96	33.96	S	210.52	W	213.25	260.84	1.26	-0.95	-7.76
40	3781.00	5.94	251.84	94.00	3768.05	-37.43	37.43	S	219.39	W	222.56	260.32	0.75	0.24	7.03
41	3874.00	7.57	253.18	93.00	3860.40	-40.71	40.71	S	229.83	W	233.41	259.96	1.76	1.75	1.44
42	3967.00	8.64	253.37	93.00	3952.47	-44.48	44.48	S	242.39	W	246.43	259.60	1.15	1.15	0.20
43	4061.00	9.41	254.66	94.00	4045.31	-48.53	48.53	S	256.56	W	261.11	259.29	0.85	0.82	1.37
44	4154.00	8.48	251.97	93.00	4137.18	-52.66	52.66	S	270.41	W	275.50	258.98	1.10	-1.00	-2.89
45	4247.00	8.58	251.57	93.00	4229.15	-56.98	56.98	S	283.52	W	289.19	258.64	0.13	0.11	-0.43
46	4340.00	8.76	253.25	93.00	4321.09	-61.21	61.21	S	296.88	W	303.12	258.35	0.33	0.19	1.81
47	4433.00	7.14	246.37	93.00	4413.19	-65.57	65.57	S	308.96	W	315.84	258.02	2.02	-1.74	-7.40
48	4526.00	8.04	248.62	93.00	4505.37	-70.26	70.26	S	320.31	W	327.92	257.63	1.02	0.97	2.42
49	4620.00	7.98	246.61	94.00	4598.46	-75.25	75.25	S	332.42	W	340.83	257.25	0.30	-0.06	-2.14
50	4713.00	7.96	251.85	93.00	4690.56	-79.82	79.82	S	344.46	W	353.59	256.95	0.78	-0.02	5.63
51	4806.00	9.23	253.43	93.00	4782.51	-83.95	83.95	S	357.73	W	367.45	256.79	1.39	1.37	1.70
52	4899.00	9.04	257.65	93.00	4874.34	-87.64	87.64	S	372.02	W	382.20	256.74	0.75	-0.20	4.54
53	4993.00	8.70	264.87	94.00	4967.21	-89.85	89.85	S	386.31	W	396.62	256.91	1.24	-0.36	7.68
54	5086.00	8.69	277.36	93.00	5059.15	-89.58	89.58	S	400.29	W	410.19	257.39	2.03	-0.01	13.43
55	5178.00	8.90	280.56	92.00	5150.07	-87.39	87.39	S	414.18	W	423.29	258.09	0.58	0.23	3.48
56	5272.00	8.66	275.66	94.00	5242.97	-85.36	85.36	S	428.37	W	436.79	258.73	0.84	-0.26	-5.21
57	5365.00	9.30	271.61	93.00	5334.83	-84.46	84.46	S	442.85	W	450.83	259.20	0.97	0.69	-4.35
58	5458.00	10.23	269.17	93.00	5426.49	-84.36	84.36	S	458.62	W	466.31	259.58	1.09	1.00	-2.62
59	5551.00	9.16	269.88	93.00	5518.16	-84.50	84.50	S	474.28	W	481.74	259.90	1.16	-1.15	0.76
60	5645.00	7.83	266.71	94.00	5611.12	-84.88	84.88	S	488.15	W	495.48	260.14	1.50	-1.41	-3.37
61	5738.00	7.05	265.86	93.00	5703.34	-85.66	85.66	S	500.17	W	507.45	260.28	0.85	-0.84	-0.91
62	5831.00	6.08	262.38	93.00	5795.73	-86.72	86.72	S	510.74	W	518.05	260.36	1.13	-1.04	-3.74
63	5924.00	5.41	256.23	93.00	5888.26	-88.42	88.42	S	519.88	W	527.35	260.35	0.98	-0.72	-6.61
64	6017.00	5.29	255.13	93.00	5980.86	-90.56	90.56	S	528.28	W	535.99	260.27	0.17	-0.13	-1.18
65	6110.00	5.08	252.70	93.00	6073.48	-92.89	92.89	S	536.36	W	544.34	260.17	0.33	-0.23	-2.61
66	6204.00	4.88	250.76	94.00	6167.12	-95.44	95.44	S	544.11	W	552.41	260.05	0.28	-0.21	-2.06
67	6297.00	4.74	247.60	93.00	6259.79	-98.21	98.21	S	551.39	W	560.07	259.90	0.32	-0.15	-3.40
68	6390.00	4.73	243.45	93.00	6352.48	-101.39	101.39	S	558.38	W	567.51	259.71	0.37	-0.01	-4.46
69	6483.00	4.54	239.01	93.00	6445.17	-105.00	105.00	S	564.96	W	574.64	259.47	0.44	-0.20	-4.77
70	6576.00	4.31	235.56	93.00	6537.90	-108.87	108.87	S	571.00	W	581.29	259.21	0.38	-0.25	-3.71
71	6669.00	4.11	234.76	93.00	6630.64	-112.77	112.77	S	576.60	W	587.53	258.93	0.22	-0.22	-0.86
72	6762.00	4.10	228.00	93.00	6723.41	-116.92	116.92	S	581.80	W	593.43	258.64	0.52	-0.01	-7.27

RECEIVED: Sep. 20, 2014

EP ENERGY*

EP Energy Company: Job Number: Calculation Method Minimum Curvature Paulsen 2-15C5 0.00 KB Well: Mag Decl.: **Proposed Azimuth** Duchesne, UT Location: Dir Driller: **Depth Reference** Rig: Precision 404 MWD Eng: Tie Into: Gyro/MWD

Survey	Survey	Inclina-		Course	True Vertical	Vertical	Cod	ord	inates		Clos	ure	Dogleg	Build	Walk
Number	Depth	tion	Azimuth	Length	Depth	Section	N/S		E/W		Distance	Direction	Severity	Rate	Rate
	(ft)	(deg)	(deg)	(ft)	(ft)	(ft)	(ft)		(ft)		(ft)	Azimuth	(d/100')	(d/100')	(d/100')
73	6856.00	3.81	224.90	94.00	6817.18	-121.38	121.38 S		586.50	W	598.93	258.31	0.38	-0.31	-3.30
74	6949.00	3.75	217.60	93.00	6909.98	-125.98	125.98 S		590.53	W	603.82	257.96	0.52	-0.06	-7.85
75	7042.00	3.64	215.83	93.00	7002.79	-130.78	130.78 S		594.12	W	608.34	257.59	0.17	-0.12	-1.90
76	7135.00	4.16	211.17	93.00	7095.57	-136.06	136.06 S		597.59	W	612.89	257.17	0.65	0.56	-5.01
77	7228.00	4.27	210.16	93.00	7188.32	-141.94	141.94 S		601.08	W	617.61	256.71	0.14	0.12	-1.09
78	7321.00	3.38	230.21	93.00	7281.12	-146.69	146.69 S		604.92	W	622.45	256.37	1.71	-0.96	21.56
79	7414.00	3.01	242.21	93.00	7373.97	-149.58	149.58 S	3	609.19	W	627.29	256.20	0.82	-0.40	12.90
80	7508.00	3.04	268.32	94.00	7467.85	-150.80	150.80 S	6	613.87	W	632.12	256.20	1.45	0.03	27.78
81	7601.00	2.96	257.41	93.00	7560.72	-151.40	151.40 S		618.67	W	636.93	256.25	0.62	-0.09	-11.73
82	7694.00	2.81	246.53	93.00	7653.60	-152.83	152.83 S	6	623.11	W	641.58	256.22	0.61	-0.16	-11.70
83	7788.00	2.50	230.04	94.00	7747.50	-155.06	155.06 S		626.79	W	645.69	256.10	0.87	-0.33	-17.54
84	7881.00	2.49	220.32	93.00	7840.42	-157.91	157.91 S	3	629.66	W	649.15	255.92	0.45	-0.01	-10.45
85	7974.00	2.85	215.93	93.00	7933.31	-161.32	161.32 S	3	632.32	W	652.57	255.69	0.44	0.39	-4.72
86	8000.00	2.70	213.01	26.00	7959.28	-162.36	162.36 S	3	633.03	W	653.52	255.62	0.79	-0.57	-11.22
87	8100.00	2.37	224.90	100.00	8059.19	-165.80	165.80 S	3	635.78	W	657.04	255.38	0.62	-0.33	11.88
88	8200.00	2.53	219.24	100.00	8159.10	-168.97	168.97 S	3	638.63	W	660.61	255.18	0.29	0.15	-5.65
89	8300.00	2.14	203.21	100.00	8259.01	-172.39	172.39 S	3	640.76	W	663.55	254.94	0.76	-0.39	-16.04
90	8400.00	2.29	206.87	100.00	8358.94	-175.88	175.88 S	3	642.40	W	666.04	254.69	0.21	0.15	3.67
91	8500.00	2.22	212.83	100.00	8458.86	-179.29	179.29 S	3	644.35	W	668.82	254.45	0.24	-0.07	5.95
92	8600.00	2.52	223.29	100.00	8558.78	-182.51	182.51 S	3	646.90	W	672.16	254.24	0.53	0.31	10.47
93	8700.00	2.17	225.91	100.00	8658.69	-185.43	185.43 S	3	649.77	W	675.71	254.07	0.37	-0.35	2.61
94	8800.00	2.48	207.54	100.00	8758.61	-188.66	188.66 S	3	652.13	W	678.87	253.86	0.80	0.31	-18.37
95	8900.00	3.27	196.03	100.00	8858.49	-193.32	193.32 S	3	653.92	W	681.89	253.53	0.98	0.80	-11.51
96	9000.00	2.90	187.66	100.00	8958.34	-198.57	198.57 S	3	655.04	W	684.47	253.14	0.58	-0.37	-8.37
97	9100.00	2.39	184.26	100.00	9058.23	-203.15	203.15 S	3	655.53	W	686.29	252.78	0.53	-0.50	-3.40
98	9200.00	2.42	202.51	100.00	9158.15	-207.18	207.18 S	3	656.50	W	688.41	252.48	0.76	0.03	18.24
99	9300.00	2.47	191.88	100.00	9258.06	-211.24	211.24 S	3	657.75	W	690.84	252.20	0.46	0.05	-10.62
100	9400.00	2.97	195.73	100.00	9357.94	-215.84	215.84 S	3	658.89	W	693.35	251.86	0.53	0.50	3.85
101	9500.00	3.41	195.13	100.00	9457.79	-221.21	221.21 S	3	660.37	W	696.44	251.48	0.45	0.44	-0.60
102	9600.00	3.22	196.49	100.00	9557.62	-226.78	226.78 S	3	661.95	W	699.72	251.09	0.21	-0.20	1.36
103	9700.00	2.92	195.36	100.00	9657.48	-231.93	231.93 S	3	663.42	W	702.79	250.73	0.30	-0.30	-1.13
104	9800.00	2.98	206.74	100.00	9757.35	-236.70	236.70 S	3	665.26	W	706.12	250.41	0.59	0.05	11.38
105	9900.00	2.69	207.24	100.00	9857.22	-241.11	241.11 S	3	667.50	W	709.71	250.14	0.29	-0.29	0.50
106	10000.00	3.11	198.15	100.00	9957.10	-245.77	245.77 S	3	669.42	W	713.11	249.84	0.62	0.42	-9.09
107	10100.00	2.70	193.91	100.00	10056.97	-250.63	250.63 S	3	670.83	W	716.12	249.51	0.46	-0.40	-4.25
108	10200.00	3.37	192.49	100.00	10156.83	-255.79	255.79 S	3	672.03	W	719.06	249.16	0.67	0.66	-1.41
109	10300.00	3.65	194.65	100.00	10256.64	-261.73	261.73 S	3	673.47	W	722.54	248.76	0.31	0.28	2.16

RECEIVED: Sep. 20, 2014

EP ENERGY*

EP Energy Company: Job Number: Calculation Method Minimum Curvature Paulsen 2-15C5 0.00 KB Well: Mag Decl.: **Proposed Azimuth** Dir Driller: Location: Duchesne, UT **Depth Reference** Rig: Precision 404 MWD Eng: Tie Into: Gyro/MWD

Survey	Survey	Inclina-		Course	True Vertical	Vertical	Coor	dinates		Clos	sure	Dogleg	Build	Walk
Number	Depth	tion	Azimuth	Length	Depth	Section	N/S	E/W		Distance	Direction	Severity	Rate	Rate
	(ft)	(deg)	(deg)	(ft)	(ft)	(ft)	(ft)	(ft)		(ft)	Azimuth	(d/100')	(d/100')	(d/100')
110	10400.00	3.52	188.62	100.00	10356.45	-267.84	267.84 S	674.74	W	725.95	248.35	0.40	-0.13	-6.03
111	10500.00	3.59	179.82	100.00	10456.25	-274.00	274.00 S	675.19	W	728.66	247.91	0.55	0.08	-8.80
112	10600.00	4.04	173.38	100.00	10556.03	-280.63	280.63 S	674.77	W	730.80	247.42	0.62	0.44	-6.44
113	10700.00	4.16	176.25	100.00	10655.78	-287.75	287.75 S	674.13	W	732.97	246.89	0.24	0.12	2.87
114	10800.00	4.01	180.65	100.00	10755.52	-294.86	294.86 S	673.93	W	735.61	246.37	0.34	-0.14	4.41
115	10900.00	3.82	172.01	100.00	10855.29	-301.66	301.66 S	673.51	W	737.98	245.87	0.62	-0.20	-8.65
116	11000.00	3.47	183.89	100.00	10955.09	-307.98	307.98 S	673.25	W	740.35	245.42	0.83	-0.35	11.88
117	11100.00	3.19	193.86	100.00	11054.92	-313.70	313.70 S	674.12	W	743.53	245.05	0.64	-0.28	9.98
118	11200.00	3.26	198.06	100.00	11154.76	-319.10	319.10 S	675.67	W	747.23	244.72	0.24	0.07	4.19
119	11300.00	3.29	191.04	100.00	11254.60	-324.61	324.61 S	677.10	W	750.89	244.39	0.40	0.03	-7.02
120	11400.00	3.34	197.89	100.00	11354.43	-330.20	330.20 S	678.54	W	754.62	244.05	0.40	0.05	6.85
121	11502.00	3.18	197.38	102.00	11456.27	-335.73	335.73 S	680.30	W	758.63	243.73	0.16	-0.16	-0.50
122	11700.00	3.18	197.38	198.00	11653.96	-346.22	346.22 S	683.58	W	766.26	243.14	0.00	0.00	0.00

	STATE OF UTAH				FORM 9
I	DEPARTMENT OF NATURAL RESOL DIVISION OF OIL, GAS, AND N		3	5.LEASE DES	SIGNATION AND SERIAL NUMBER:
SUNDR	Y NOTICES AND REPORT	SON	WELLS	6. IF INDIAN,	ALLOTTEE OR TRIBE NAME:
	posals to drill new wells, significan eenter plugged wells, or to drill hor for such proposals.			7.UNIT or CA	AGREEMENT NAME:
1. TYPE OF WELL Oil Well	8. WELL NAM Paulsen 2-	ME and NUMBER: 15C5			
2. NAME OF OPERATOR: EP ENERGY E&P COMPANY,	L.P.			9. API NUMBI 43013528	
3. ADDRESS OF OPERATOR: 1001 Louisiana , Houston,	TX, 77002 713 997	PHO 7-5038	NE NUMBER: Ext	9. FIELD and ALTAMON	POOL or WILDCAT:
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0906 FNL 1814 FWL				COUNTY: DUCHESNE	:
QTR/QTR, SECTION, TOWNSH Qtr/Qtr: NENW Section:	IIP, RANGE, MERIDIAN: 15 Township: 03.0S Range: 05.0W N	Meridian	: U	STATE: UTAH	
11. CHECI	APPROPRIATE BOXES TO INDIC	CATE N	ATURE OF NOTICE, REPOR	T, OR OTHE	ER DATA
TYPE OF SUBMISSION			TYPE OF ACTION		
	ACIDIZE	A	ALTER CASING	☐ cas	ING REPAIR
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS		CHANGE TUBING	СНА	NGE WELL NAME
	CHANGE WELL STATUS		COMMINGLE PRODUCING FORMATIONS	☐ con	IVERT WELL TYPE
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	□ F	FRACTURE TREAT	□ NEW	CONSTRUCTION
11/23/2015	OPERATOR CHANGE	P	PLUG AND ABANDON	PLUG	G BACK
SPUD REPORT	PRODUCTION START OR RESUME	□ R	RECLAMATION OF WELL SITE	REC	OMPLETE DIFFERENT FORMATION
Date of Spud:	REPERFORATE CURRENT FORMATION		SIDETRACK TO REPAIR WELL	□ тем	PORARY ABANDON
	TUBING REPAIR	□ v	/ENT OR FLARE	☐ wat	TER DISPOSAL
DRILLING REPORT Report Date:	WATER SHUTOFF	□ s	SI TA STATUS EXTENSION	☐ APD	EXTENSION
	WILDCAT WELL DETERMINATION	1	THER	OTHER:	Pouting
42 DESCRIBE BRODOSED OR	COMPLETED OPERATIONS. Clearly sho	au all mar	winest details including dates d		
	size & deepen. See attache			Acc Uta Oil, G	septed by the sh Division of sas and Mining RECORD ONLY or only 100, 2016
NAME (PLEASE PRINT)	PHONE NU	MBER	TITLE		
Maria S. Gomez	713 997-5038		Principal Regulatory Analys	t	
SIGNATURE N/A			DATE 1/13/2016		

RECEIVED: Jan. 13, 2016

CENTRAL DIVISION

1 General

1.1 Customer Information

Company	CENTRAL DIVISION
Representative	
Address	

1.2 Well Information

Well	PAULSEN 2-15C5							
Project	ALTAMONT FIELD	Site	PAULSEN 2-15C5					
Rig Name/No.	WESTERN WELL SERVICE/	Event	WORKOVER LAND					
Start date	11/18/2015	End date	11/24/2015					
Spud Date/Time	7/13/2014	UWI	PAULSEN 2-15C5					
Active datum	KB @5,929.9ft (above Mean Sea Level)							
Afe	165806/55566 / PAULSEN 2-15C5							
No./Description								

2 Summary

2.1 Operation Summary

Date		Time art-End	Duratio n (hr)	Phase	Activit y	Sub	OP Code	MD from (ft)	Operation
11/20/2015	6:00	7:30	1.50	MIRU	01		Р		TRAVEL TO LOCATION, HSM, R/U COROD RIG SLIDE ROTAFLEX BACK, LOTO ROTAFLEX 6 AM HOT OILER START PUMPING DOWN CSG W/ 2% KCL @ 200 DEG
	7:30	11:00	3.50	MIRU	01		P		R/U COROD RIG, L/D POLISH ROD, ATTEMPT TO UNSEAT PUMP, NO LUCK, P/U POLISH ROD, J-OFF ON OFF TOOL, HAD TO USE WORKOVER RIGS TONGS TO J-OFF, L/D POLISH ROD, 1" EL PONY RODS-1-2', 1-4', 1-6', 1-8'
	11:00	13:30	2.50	WBP	39		Р		POOH W/ 910'-18/16" SE COROD, 850'-17/16" SE COROD, 1075'-16/16" SE COROD, 4585'-15/16" SE COROD, 40'-16/16" SE COROD, 950'-17/16" SE COROD, TOP OF ON OFF TOOL
	13:30	14:30	1.00	MIRU	01		Р		RDMO COROD RIG, MIRU W/O RIG.
	14:30	16:30	2.00	WLWORK	21		Р		MIRU THE PERFORATORS, RIH W 1 9/16" TBG PUNCH LOADED 4SPF, PERF TBG @ 8452'-8453', POOH R/D WL. VERY WAXY & SLOW GOING IN HOLE, PULLED OVER PART WAY OOH
	16:30	17:00	0.50	WOR	18		Р		HOT OILER FLUSH TBG W/ 40 BBLS 2% KCL @ 200 DEG
	17:00	18:00	1.00	WOR	16		Р		N/D WH, UNLAND TBG, REMOVE 10K B-FLANGE, ADD 6'-2 7/8" N-80 TBG SUB & HANGER, RELAND TBG ON HANGER, N/U BOPS, R/U FLOOR & TBG TONGS, RELEASE TAC, L/D TBG SUB & HANGER PIPE RAMS CLOSED & LOCKED, TBG SHUT IN, CSG TO SALES, SDFN.
									2% KCL PUMPED = 600 BBLS DIESEL USED = 120 GAL PROPANE USED = 575 GAL
11/21/2015	6:00	7:30	1.50	WOR	28		Р		TRAVEL TO LOCATION, HSM, L/D TUBING 100# SITP & FCP, BLEED OFF HOT OILER FLUSH TBG 2/ 60 BBLS 2% KCL @ 200 DEG

RECEIVED: Jan. 13, 2016

CENTRAL DIVISION

2.1 **Operation Summary (Continued)**

Dete			5	ntio Phase		Cub	0.0		Onematica
Date		Time art-End	Duratio n	Phase	Activit y	Sub	OP Code	MD from	Operation
	310	ai t-Eilu	(hr)		у		Code	(ft)	
	7:30	15:00	7.50	WOR	39		P		MIRU TUBOSCOPE TBG SCANNERS, SCAN OOH W/ 257 JTS 2 7/8" L-80 TBG, R/D SCANNERS, L/D 7" TAC, 1 JT 2 7/8" L-80 TBG, 1 JT 2 7/8" L-80 TBG(PERFORATED, 1 JT 2 7/8" L-80 TBG, 1 JT 2 7/8" L-80 TBG 4'-2 7/8" N-80 TBG SUB, 2 7/8" SEAT NIPPLE W/ PUMP STUCK IN, 2'-2 7/8" L-80 TBG, 5 1/2" PBGA, 2 JTS 2 7/8" L-80 TBG, 5 3/4" SOLID NO-GO. (HAD TO KILL TBG SEVERAL TIMES POOH) 257 JTS SCANNED YELLOW BAND BLUE BAND RED BAND
	15:00	17:30	2.50	WLWORK	18		P		LAID DOWN ALL BLUE & RED BAND RIH W/ WL REENTRY GUIDE, 60 JTS 2 7/8" L-80 TBG, EOT @ 2000' CLOSE PIPE RAMS, MIRU THE PERFORATORS RIH W/ 1 11/16" SINKER BARS TAG @ 11583' WLD, BTM PERF @ 11494', POOH R/D WL,.TBG SHUT IN, CSG TO SALES, SDFN. 2% KCL PUMPED = 285 BBLS DIESEL USED = 84 GAL PROPANE USED = 325 GAL
11/22/2015	6:00	7:30	1.50	WOR	28		Р		TRAVEL TO LOCATION, HSM, P/U TBG & HYDROTESTING TBG 100# SITP & FCP, BLEED OFF HOT OILER FLUSH TBG W/ 30 BBLS 2% KCL @ 200 DEG
	7:30	8:30	1.00	WOR	39		Р		EOT @ 2000' POOH W/ 60 JTS 2 7/8" L-80 YELLOW BAND TBG, L/D WL REENTRY GUIDE. X/O TOO 2 3/8" PIPE RAMS
	8:30	18:00	9.50	WOR	39		P		P/U & RIH W/ 2 3/8" BULL PLUG, 2 JTS 2 3/8" L-80 YELLOW BAND TBG, 2 3/8" DESANDER W/ #5 SPIRAL, 2'-2 3/8" N-80 TBG SUB, 2 3/8" SEAT NIPPLE, 4'-2 3/8" N-80 TBG SUB, 4 JTS 2 3/8" L-80 YELLOW BAND TBG, 5"-1/4 SET TAC, 66 JTS 2 7/8" L-80 YELLOW BAND TBG, R/U HYDROTESTER, HYDROTEST TO 8500 PSI W/ 2 7/8" X 2 3/8" EUE X/O SUB, 53 JTS 2 7/8" L-80 YELLOW BAND TBG, PULL HYDROTEST TOOLS, P/U & RIH W/ 6 JTS 2 7/8" TK-900 LINED TBG, P/U TOOLS CONT HYDROTESTING W/ 114 JTS 2 7/8" L-80 YELLOW BAND TBG, PULL TOOLS, P/U 10 JTS 2 7/8" TK-900, CONT HYDROTESTING W/ 18 JTS 2 7/8" L-80 YELLOW BAND TBG, PULL TOOLS, P/U 10 JTS 2 7/8" TK-900, CONT HYDROTESTING W/ 18 JTS 2 7/8" L-80 YELLOW BAND, R/D HYDROTESTER, (NO LEAKSOR BLOWN JTS) CONT IN W/ 59 JTS 2 7/8" L-80 YELLOW BAND TESTED & INSPECTED BY TUBOSCOPE, P/U 6' TBG SUB & HANGER, SET 5" -1/4 SET TAC @ 10575' W/ 20K TENSION, CLOSE PIPE RAMS, TBG SHUT IN, CSG TO SALES, SDFN. 2% KCL PUMPED = 50 BBLS DIESEL USED = 84 GAL PROPANE USED = 75 GAL
11/23/2015	6:00	7:30	1.50	WOR	28		Р		TRAVEL TO LOCATION, HSM, SUSPENDED LOADS 100# SITP & FCP, BLEED OFF
	7:30	9:00	1.50	WOR	16		Р		ADD 6'-2 7/8' N-80 TBG SUB & HANGER, LAND TBG ON HANGER, N/D BOPS, UNLAND TBG REMOVE TBG SUB & HANGER, ADD 10K B-FLANGE, LAND TBG ON B-FLANGE, N/U WH, HOOK UP FLOWLINE, INSTALL CAPSTRING ASSEMBLY.
	9:00	10:00	1.00	RDMO	02		Р		RDMO W/O RIG HOT OILER FLUSH TBG W/ 60 BBLS 2% KCL @ 200 DEG, SPOT 10 GAL CORROSION INHIBITOR.
	10:00	11:00	1.00	MIRU	01		Р		MIRU CO ROD RIG

CENTRAL DIVISION

2.1 Operation Summary (Continued)

Date		Time ert-End	Duratio n (hr)	Phase	Activit y	Sub	OP Code	MD from (ft)	Operation
	11:00	17:30	6.50	WBP	03		Р		P/U APS 2"X 1 1/2" X38' RHBC PUMP W/ 2SV, WELD ON PIN, RIH W/ 1365' NEW 16/16" SE COROD, WELD TO 17/16" SE COROD FROM WELL, RIH, POOH & CUT OFF 950'-17/16" SE COROD, 40'-16/16" SE COROD, 2070'-15/16" SE COROD, WELD ON NEW 15/16" SE COROD, EOR @ 1400', CLOSE & PSI UP BAG, DOUBLE CLAMP COROD, TBG SHUT IN, CSG TO SALES, SDFN. 2% KCL PUMPED = 65 BBLS DISEL USED = 62 GAL PROPANE USED = 75 GAL
11/24/2015	6:00	7:30	1.50	WBP	28		Р		TRAVEL TO LOCATION, HSM, SPLICING COROD 100# SITP & FCP, BLEED OFF
	7:30	14:30	7.00	WBP	39		P		EOR @ 1400', CONT RIH SPLICING ON 15/16" & RIH W/ 16/16", 17/16" & 18/16", CUT OFF 90'-18/16" WELD ON PIN, RIH, SPACE W/ 1" EL PONY RODS = 1-4', 1-6', 1-8' P/U NEW 1 1/2" X 40' POLISH ROD, HANG OFF. COROD TAPERS 18/16" SE COROD-820' 17/16" SE COROD-845' 16/16" SE COROD-1072' 15/16" SE COROD-6382' 16/16" SE COROD-1365'
	14:30	15:00	0.50	WBP	18		Р		HOT OILER FILL TBG W/ 30 BBLS 2% KCL, PSI TEST TO 500#, STROKE TEST TO 1000#, GOOD TEST, PSI TEST CV TO 1000#, GOOD, PUMP 20 BBLS 2% KCL @ 200 DEG ACROSS FLOWLINE
	15:00	15:30	0.50	RDMO	02		Р		RDMO COROD RIG, SLIDE ROTAFLEX IN, CHECK PUMP, TWOTO. 2% KCL PUMPED = 210 BBLS DIESEL USED = 52 GAL PROPANE USED = 150 GAL

	STATE OF UTAH		FORM 9
	DEPARTMENT OF NATURAL RESOURCE DIVISION OF OIL, GAS, AND MINI		5.LEASE DESIGNATION AND SERIAL NUMBER: Fee
SUNDF	RY NOTICES AND REPORTS O	N WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
	oposals to drill new wells, significantly de reenter plugged wells, or to drill horizont n for such proposals.		7.UNIT or CA AGREEMENT NAME:
1. TYPE OF WELL Oil Well			8. WELL NAME and NUMBER: Paulsen 2-15C5
2. NAME OF OPERATOR: EP ENERGY E&P COMPANY,	L.P.		9. API NUMBER: 43013528420000
3. ADDRESS OF OPERATOR: 1001 Louisiana, Houston,		PHONE NUMBER: 38 Ext	9. FIELD and POOL or WILDCAT: ALTAMONT
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0906 FNL 1814 FWL			COUNTY: DUCHESNE
QTR/QTR, SECTION, TOWNSI Qtr/Qtr: NENW Section:	HIP, RANGE, MERIDIAN: 15 Township: 03.0S Range: 05.0W Merid	ian: U	STATE: UTAH
11. CHEC	K APPROPRIATE BOXES TO INDICATE	NATURE OF NOTICE, REPOR	RT, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
l .	ACIDIZE CHANGE TO PREVIOUS PLANS CHANGE WELL STATUS DEEPEN OPERATOR CHANGE PRODUCTION START OR RESUME REPERFORATE CURRENT FORMATION TUBING REPAIR WATER SHUTOFF WILDCAT WELL DETERMINATION COMPLETED OPERATIONS. Clearly show all need recompletion procedure at	-	Approved by the
	post WBD's.		Utane 20 is 201 of Oil, Gas and Mining Date: By: Date: By: Date: D
NAME (PLEASE PRINT) Linda Renken	PHONE NUMBE 713 997-5138	R TITLE Sr. Regulatory Analyst	
SIGNATURE N/A		DATE 6/16/2016	

Paulson 2-15 C5 Recom Summary Procedure

- POOH with rods, pump & tubing. Inspect/Repair/Re-furbish as needed. Replace any bad tubing and joints of rods.
- Set 15k CBP for 5" 18# casing @ 8,905'.
- Stage 1:
 - o Perforate new CP70 interval from 8,718' 8,862'.
 - Prop Frac Perforations with 80,000 lbs 30/50 prop (w/ 6,000 lbs 100 mesh & 10,000 gals 15% HCl acid (Stage 1 Recom).
- Stage 2:
 - o RIH with 7" CBP & set @ 8,585'.
 - o Perforate new LGR interval from 8,423' 8,570'.
 - Prop Frac Perforations with 80,000 lbs 30/50 prop (w/ 6,000 lbs 100 mesh & 10,000 gals 15% HCl acid (Stage 2 Recom).
- Stage 3:
 - o RIH w/ 7" CBP & set @ 8,348'.
 - o Perforate new LGR interval from 8,302' 8,333'.
 - o Acid Frac perforations with **6,000** gals 15% HCl acid (Stage 3 Recom).
- Clean out well drilling up (2) 7" CBPs leaving 5" 15k CBP w/15' CMT @ 8,905'. (PBTD @ 8,890') Top perf BELOW plugs @ 8,940'.
- RIH w/ production tubing and rods.
- Clean location and resume production.

Stage #1 11194 - 11494 23' /69 shots

5000 gal HCL & 145000 lbs Power Prop 20/40



Current Pumping Wellbore Schematic

Well Name: Paulsen 2-15C5 Last Updated: 6/16/2016 Company Name: EP Energy Krug By: Field, County, State: Altamont, Duchesne, UT 11,698 TD: Surface Location: Lat: 40°13'29.635" N Long: 110°26'21.721" W 43013528420000 API: Producing Zone(s): Wasatch AFE: 13-3/8" 54.5# J-55 STC @ 630 ft. MD 76 Jts 2-7/8" 6.5# L-80 8rd Tubing 2' 2-7/8" 6.5# L-80 8rd Pup Jt 10 Jts 2-7/8" TK-900 TBG 2' 2-7/8" 6.5# L-80 8rd Pup Jt 114 Jts 2-7/8" 6.5# L-80 8rd Tubing 9-5/8" 40# N-80 LTC @ 1716 ft. MD 2' 2-7/8" 6.5# L-80 8rd Pup Jt 6 Jts 2-7/8" TK-900 TBG 2' 2-7/8" 6.5# L-80 8rd Pup Jt Estimated TOC at: 4,040 ft MD 53 Jts 2-7/8" 6.5# L-80 8rd Pup Jt Rod Detail @ 4.3 SPM 1-1/2" x 40' Polished Rod 2-7/8" x 2-3/8" Crossover @ 8,488' 910' - 18/16" CoRod ~66 jts of 2-3/8" 4.7# N-80 8rd Tubing 850' - 17/16" CoRod 1,075' - 16/16" CoRod 6,500' - 15/16" CoRod Top of Liner at: 8,684 ft MD 1,365' - 16/16" CoRod 7" 29# HCP-110 LTC @ 8930 ft. MD Drift ID = 6.059" Liner TOC @ 8684 ft Tubing Anchor @ 10,554' 4 jts 2-3/8" 4.7# N-80 8rd Tubing **Initial Completion Perf Information** Seating Nipple @ ~10,682' Stage #8 8940 - 9179 23' /69 shots 2' x 2 3/8" Tubing Sub 5000 gal HCL & 130000 lbs TLC 30/50 De-sander - D2305 Stage #7 9205 - 9477 23' /69 shots 2 jt 2-3/8" Mud Anchor 5000 gal HCL & 150000 lbs TLC 30/50 EOT @ ~10,773' 23' /69 shots Stage #6 9510 - 9781 5000 gal HCL & 140000 lbs TLC 30/50 22' /66 shots Stage #5 9813 - 10073 5000 gal HCL & 140000 lbs TLC 30/50 Stage #4 10135 - 10460 23' /69 shots 5000 gal HCL & 150000 lbs TLC 30/50 Stage #3 10498 - 10814 23' /69 shots 5000 gal HCL & 145000 lbs Power Prop 20/40 Stage #2 10848 - 11166 23' /69 shots 5000 gal HCL & 155000 lbs Power Prop 20/40 PBTD @ 11,612'

5" 18# HCP-110 STL @ 8684 - 11700 ft. MD

Drift ID = 4.151"

Stage #1 11194 - 11494 23' /69 shots

5000 gal HCL & 145000 lbs Power Prop 20/40



Proposed Recom Wellbore Schematic

Well Name: Paulsen 2-15C5 6/16/2016 Last Updated: Company Name: EP Energy Tomova Field, County, State: Altamont, Duchesne, UT 11,698 Surface Location: Lat: 40°13'29.635" N Long: 110°26'21.721" W 43013528420000 API: Producing Zone(s): Wasatch AFE: 13-3/8" 54.5# J-55 STC @ 630 ft. MD 9-5/8" 40# N-80 LTC @ 1716 ft. MD **Estimated TOC at:** 4,040 ft MD July 2016 Recom STG 3: 8,302' - 8,333' (10'/30 holes) 6,000 gals HCl STG 2: 8,423' - 8,570' (20'/60 holes) Top of Liner at: 8,684 ft MD 10,000 gals HCl + 6,000 lbs 100M + 80,000 lbs 30/50 STG 1: 8,718' - 8,862' (21'/63 holes) 7" 29# HCP-110 LTC @ 8930 ft. MD 10,000 gals HCl + 6,000 lbs 100M + 80,000 lbs 30/50 Drift ID = 6.059" Liner TOC @ 8684 ft CBP @ 8,905' w/ 15' CMT **Initial Completion Perf Information** Stage #8 8940 - 9179 23' /69 shots 5000 gal HCL & 130000 lbs TLC 30/50 23' /69 shots Stage #7 9205 - 9477 5000 gal HCL & 150000 lbs TLC 30/50 Stage #6 9510 - 9781 23' /69 shots 5000 gal HCL & 140000 lbs TLC 30/50 Stage #5 9813 - 10073 22' /66 shots 5000 gal HCL & 140000 lbs TLC 30/50 Stage #4 10135 - 10460 23' /69 shots 5000 gal HCL & 150000 lbs TLC 30/50 Stage #3 10498 - 10814 23' /69 shots 5000 gal HCL & 145000 lbs Power Prop 20/40 Stage #2 10848 - 11166 23' /69 shots PBTD @ 11,612' 5000 gal HCL & 155000 lbs Power Prop 20/40

5" 18# HCP-110 STL @ 8684 - 11700 ft. MD

Drift ID = 4.151"

			1
	STATE OF UTAH		FORM 9
	DEPARTMENT OF NATURAL RESOURCE		5.LEASE DESIGNATION AND SERIAL NUMBER:
	DIVISION OF OIL, GAS, AND MIN	ING	Fee
SUNDF	RY NOTICES AND REPORTS (ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
	leepen existing wells below Ital laterals. Use APPLICATION	7.UNIT or CA AGREEMENT NAME:	
1. TYPE OF WELL Oil Well			8. WELL NAME and NUMBER: Paulsen 2-15C5
2. NAME OF OPERATOR: EP ENERGY E&P COMPANY,	,L.P.		9. API NUMBER: 43013528420000
3. ADDRESS OF OPERATOR: 1001 Louisiana, Houston,		PHONE NUMBER: 38 Ext	9. FIELD and POOL or WILDCAT: ALTAMONT
4. LOCATION OF WELL FOOTAGES AT SURFACE:			COUNTY: DUCHESNE
0906 FNL 1814 FWL QTR/QTR, SECTION, TOWNSI Qtr/Qtr: NENW Section:	HIP, RANGE, MERIDIAN: 15 Township: 03.0S Range: 05.0W Merio	dian: U	STATE: UTAH
11. CHEC	K APPROPRIATE BOXES TO INDICAT	E NATURE OF NOTICE, REPOR	RT, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
			П
✓ NOTICE OF INTENT	ACIDIZE	ALTER CASING	☐ CASING REPAIR
Approximate date work will start: 7/7/2016	✓ CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME
	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	FRACTURE TREAT	NEW CONSTRUCTION
	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK
	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	✓ RECOMPLETE DIFFERENT FORMATION
SPUD REPORT Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON
	TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL
DRILLING REPORT	WATER SHUTOFF	SI TA STATUS EXTENSION	APD EXTENSION
Report Date:			OTHER
	WILDCAT WELL DETERMINATION	OTHER	OTHER:
This is a change of a stage 4 to this record, 2016. Please se	completed operations. Clearly show a plans to approved Sundry 72 completion and accelerate the see attached version 2 recompwith current and proposed WE	2428. They want to add s start work date to July detion summary along	Approved by the
NAME (PLEASE PRINT)	PHONE NUMBE	R TITLE	
Linda Renken	713 997-5138	Sr. Regulatory Analyst	
SIGNATURE N/A		DATE 6/30/2016	

Paulsen 2-15 C5 Recom Summary Procedure V2

- POOH with rods, pump & tubing. Inspect/Repair/Re-furbish as needed. Replace any bad tubing and joints of rods.
- Set 15k CBP for 5" 18# casing @ 8,905'.
- Stage 1:
 - o Perforate new CP70 interval from 8,718' 8,862'.
 - Prop Frac Perforations with 80,000 lbs 30/50 prop (w/ 6,000 lbs 100 mesh & 10,000 gals 15% HCl acid (Stage 1 Recom).
- Stage 2:
 - o RIH with 7" CBP & set @ 8,585'.
 - o Perforate new LGR interval from 8,423' 8,570'.
 - Prop Frac Perforations with 80,000 lbs 30/50 prop (w/ 6,000 lbs 100 mesh & 10,000 gals 15% HCl acid (Stage 2 Recom).
- Stage 3:
 - o RIH w/ 7" CBP & set @ 8,348'.
 - o Perforate new LGR interval from 8,302' 8,333'.
 - o Acid Frac perforations with **6,000** gals 15% HCl acid (Stage 3 Recom).
- Stage 4:
 - o RIH w/7" CBP & set @ 8,045'.
 - o Perforate new LGR interval from **7,951 8,030**'.
 - o Acid Frac perforations with **9,000** gals 15% HCl acid (Stage 4 Recom).
- Clean out well drilling up (3) 7" CBPs leaving 5" 15k CBP w/15' CMT @ 8,905'. (PBTD @ 8,890') Top perf BELOW plugs @ 8,940'.
- RIH w/ production tubing and rods.
- Clean location and resume production.

5000 gal HCL & 155000 lbs Power Prop 20/40

5000 gal HCL & 145000 lbs Power Prop 20/40

Stage #1 11194 - 11494 23' /69 shots



Current Pumping Wellbore Schematic

Well Name: Paulsen 2-15C5 Last Updated: 6/16/2016 Company Name: EP Energy Krug By: Field, County, State: Altamont, Duchesne, UT 11,698 TD: Surface Location: Lat: 40°13'29.635" N Long: 110°26'21.721" W 43013528420000 API: Producing Zone(s): Wasatch AFE: 13-3/8" 54.5# J-55 STC @ 630 ft. MD 76 Jts 2-7/8" 6.5# L-80 8rd Tubing 2' 2-7/8" 6.5# L-80 8rd Pup Jt 10 Jts 2-7/8" TK-900 TBG 2' 2-7/8" 6.5# L-80 8rd Pup Jt 114 Jts 2-7/8" 6.5# L-80 8rd Tubing 9-5/8" 40# N-80 LTC @ 1716 ft. MD 2' 2-7/8" 6.5# L-80 8rd Pup Jt 6 Jts 2-7/8" TK-900 TBG 2' 2-7/8" 6.5# L-80 8rd Pup Jt Estimated TOC at: 4,040 ft MD 53 Jts 2-7/8" 6.5# L-80 8rd Pup Jt Rod Detail @ 4.3 SPM 1-1/2" x 40' Polished Rod 2-7/8" x 2-3/8" Crossover @ 8,488' 910' - 18/16" CoRod ~66 jts of 2-3/8" 4.7# N-80 8rd Tubing 850' - 17/16" CoRod 1,075' - 16/16" CoRod 6,500' - 15/16" CoRod Top of Liner at: 8,684 ft MD 1,365' - 16/16" CoRod 7" 29# HCP-110 LTC @ 8930 ft. MD Drift ID = 6.059" Liner TOC @ 8684 ft Tubing Anchor @ 10,554' 4 jts 2-3/8" 4.7# N-80 8rd Tubing **Initial Completion Perf Information** Seating Nipple @ ~10,682' Stage #8 8940 - 9179 23' /69 shots 2' x 2 3/8" Tubing Sub 5000 gal HCL & 130000 lbs TLC 30/50 De-sander - D2305 Stage #7 9205 - 9477 23' /69 shots 2 jt 2-3/8" Mud Anchor 5000 gal HCL & 150000 lbs TLC 30/50 EOT @ ~10,773' 23' /69 shots Stage #6 9510 - 9781 5000 gal HCL & 140000 lbs TLC 30/50 22' /66 shots Stage #5 9813 - 10073 5000 gal HCL & 140000 lbs TLC 30/50 Stage #4 10135 - 10460 23' /69 shots 5000 gal HCL & 150000 lbs TLC 30/50 Stage #3 10498 - 10814 23' /69 shots 5000 gal HCL & 145000 lbs Power Prop 20/40 Stage #2 10848 - 11166 23' /69 shots

5" 18# HCP-110 STL @ 8684 - 11700 ft. MD

Drift ID = 4.151"

PBTD @ 11,612'



Proposed Recom Wellbore Schematic

Well Name: Paulsen 2-15C5

Company Name: EP Energy

Field, County, State: Altamont, Duchesne, UT

Surface Location: Lat: 40°13'29.635" N Long: 110°26'21.721" W

Producing Zone(s): Wasatch

 Last Updated:
 6/30/2016

 By:
 Weitzel/Tomova

 TD:
 11,698

 API:
 43013528420000

 AFE:
 43013528420000

AL Design Pending

Rod Detail @ 4.3 SPM

1-1/2" x 40' Polished Rod

- ' 18/16" CoRod
- ' 17/16" CoRod
- ' 16/16" CoRod
- ' 15/16" CoRod
- ' 16/16" CoRod
- ' 17/16" CoRod

July 2016 Recom

STG 4: 7,951' - 8,030' (16'/48 holes)

9,000 gals HCl

STG 3: 8,302' - 8,333' (10'/30 holes)

6,000 gals HCl

STG 2: 8,423' - 8,570' (20'/60 holes)

10,000 gals HCl + 6,000 lbs 100M + 80,000 lbs 30/50

STG 1: 8,718' - 8,862' (21'/63 holes)

10,000 gals HCl + 6,000 lbs 100M + 80,000 lbs 30/50

Initial Completion Perf Information

Stage #8 8940 - 9179 23' /69 shots

5000 gal HCL & 130000 lbs TLC 30/50

Stage #7 9205 - 9477 23' /69 shots

5000 gal HCL & 150000 lbs TLC 30/50

Stage #6 9510 - 9781 23' /69 shots

5000 gal HCL & 140000 lbs TLC 30/50

Stage #5 9813 - 10073 22' /66 shots

5000 gal HCL & 140000 lbs TLC 30/50 <u>Stage #4</u> 10135 - 10460 23' /69 shots

5000 gal HCL & 150000 lbs TLC 30/50

Stage #3 10498 - 10814 23' /69 shots

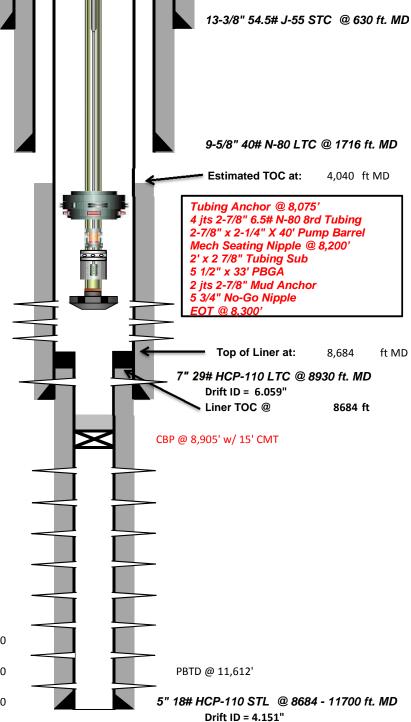
5000 gal HCL & 145000 lbs Power Prop 20/40

Stage #2 10848 - 11166 23' /69 shots

5000 gal HCL & 155000 lbs Power Prop 20/40

Stage #1 11194 - 11494 23' /69 shots

 $5000~\mbox{gal}$ HCL & 145000 lbs Power Prop 20/40



			FORM 9	
STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES				
	DIVISION OF OIL, GAS, AND MIN		5.LEASE DESIGNATION AND SERIAL NUMBER: Fee	
SUNDF	RY NOTICES AND REPORTS	ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:	
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.			7.UNIT or CA AGREEMENT NAME:	
1. TYPE OF WELL Oil Well			8. WELL NAME and NUMBER: Paulsen 2-15C5	
2. NAME OF OPERATOR: EP ENERGY E&P COMPANY,	9. API NUMBER: 43013528420000			
3. ADDRESS OF OPERATOR: PHONE NUMBER: 1001 Louisiana, Houston, TX, 77002 713 997-5138 Ext			9. FIELD and POOL or WILDCAT: ALTAMONT	
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0906 FNL 1814 FWL			COUNTY: DUCHESNE	
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NENW Section: 15 Township: 03.0S Range: 05.0W Meridian: U			STATE: UTAH	
11. CHEC	K APPROPRIATE BOXES TO INDICA	TE NATURE OF NOTICE, REPOR	RT, OR OTHER DATA	
TYPE OF SUBMISSION	TYPE OF ACTION			
	ACIDIZE	ALTER CASING	CASING REPAIR	
NOTICE OF INTENT Approximate date work will start:	✓ CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME	
8/27/2016	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE	
SUBSEQUENT REPORT	DEEPEN	FRACTURE TREAT	☐ NEW CONSTRUCTION	
□ SUBSEQUENT REPORT Date of Work Completion:	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK	
	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	✓ RECOMPLETE DIFFERENT FORMATION	
SPUD REPORT Date of Spud:	=			
Date of opau.	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON	
	L TUBING REPAIR	☐ VENT OR FLARE	WATER DISPOSAL	
DRILLING REPORT Report Date:	WATER SHUTOFF	SI TA STATUS EXTENSION	APD EXTENSION	
	WILDCAT WELL DETERMINATION	OTHER	OTHER:	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. We have swab tested stages 2 – 4 of the July 2016 recom on the attached WBDs. We need to squeeze stage 3 because it only looks to be producing water. There are 3 WBDs in the attached PDF. • Page 1 is the current WBD with all 4 stages open. • Page 2 is the proposed WBD after squeezing stage 3. We would like to squeeze stage 3 in the next few days. o The cement squeeze will be pumped on stage 3 (8,308' – 8,333'), and the retainer will be left @ 8,250' and CBP @ 8,360'. o The artificial lift equipment will be installed and Stage 4 will be tested for 1 to 6 weeks. • Page 3 is the proposed WBD after drilling out the squeeze. This will take place in 1 to 6 weeks. o The production equipment will be removed. o The squeeze will be drilled out and tested to 1,000 psi. o The artificial lift equipment will be re-run to produce stages 1, 2, and 4 of the July 2016 recom.				
NAME (PLEASE PRINT) Linda Renken	PHONE NUMB 713 997-5138	SER TITLE Sr. Regulatory Analyst		
SIGNATURE N/A		DATE 8/25/2016		



Current Recom Wellbore Schematic

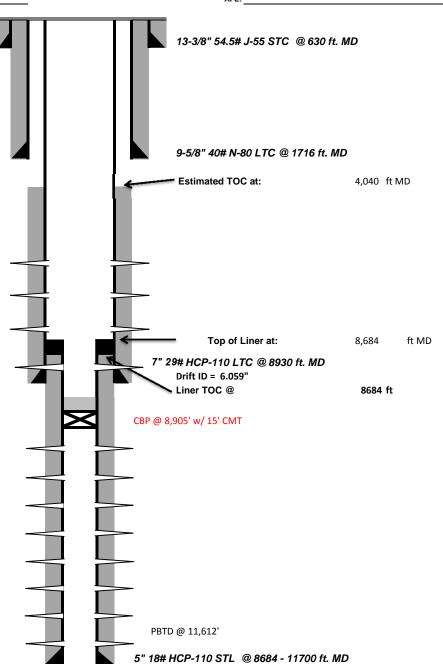
 Well Name:
 Paulsen 2-15C5
 Last Updated:
 8/25/2016

 Company Name:
 EP Energy
 By:
 Krug

 Field, County, State:
 Altamont, Duchesne, UT
 TD:
 11,698

 Surface Location:
 Lat: 40°13′29.635″ N Long: 110°26′21.721″ W
 API:
 43013528420000

 Producing Zone(s):
 Wasatch
 AFE:



Drift ID = 4.151"

July 2016 Recom

STG 4: 7,951' - 8,030' (16'/48 holes) 10,180 gals HCl

STG 3: 8,308' - 8,333' (10'/30 holes)

7,472 gals HCl

STG 2: 8,423' - 8,570' (20'/60 holes)

8,469 gals HCl + 6,040 lbs 100M + 84,120 lbs 30/50

STG 1: 8,718' - 8,862' (21'/63 holes) 9,049 gals HCl + 4,900 lbs 100M + 81,100 lbs 30/50

<u>Initial Completion Perf Information</u>

<u>Stage #8</u> 8940 - 9179 23' /69 shots 5000 gal HCL & 130000 lbs TLC 30/50

<u>Stage #7</u> 9205 - 9477 23' /69 shots 5000 gal HCL & 150000 lbs TLC 30/50

Stage #6 9510 - 9781 23' /69 shots 5000 gal HCL & 140000 lbs TLC 30/50

Stage #5 9813 - 10073 22' /66 shots

5000 gal HCL & 140000 lbs TLC 30/50
Stage #4 10135 - 10460 23' /69 shots

5000 gal HCL & 150000 lbs TLC 30/50

Stage #3 10498 - 10814 23' /69 shots

5000 gal HCL & 145000 lbs Power Prop 20/40

<u>Stage #2</u> 10848 - 11166 23' /69 shots 5000 gal HCL & 155000 lbs Power Prop 20/40

<u>Stage #1</u> 11194 - 11494 23' /69 shots

5000 gal HCL & 145000 lbs Power Prop 20/40

July 2016 Recom

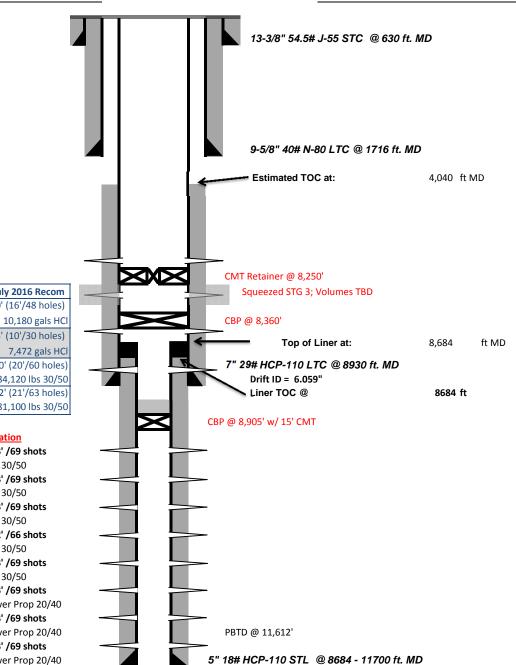
STG 4: 7,951' - 8,030' (16'/48 holes)



Proposed Recom Squeeze Wellbore Schematic (During Extended Stage 4 Test)

Well Name:	Paulsen 2-15C5		
Company Name:	EP Energy		
Field, County, State:	Altamont, Duchesne, UT		
Surface Location:	Lat: 40°13'29.635" N	Long: 110°26'21.721" W	
Producing Zone(s):	Wasatch		

Last Updated:	8/25/2016	
By:	Krug	
TD:	11,698	
API:	PI: 43013528420000	
AFE:		



Drift ID = 4.151"

STG 3: 8,308' - 8,333' (10'/30 holes) **SQUEEZED** 7,472 gals HCl STG 2: 8,423' - 8,570' (20'/60 holes) 8,469 gals HCl + 6,040 lbs 100M + 84,120 lbs 30/50 STG 1: 8,718' - 8,862' (21'/63 holes) 9,049 gals HCl + 4,900 lbs 100M + 81,100 lbs 30/50 **Initial Completion Perf Information** Stage #8 8940 - 9179 23' /69 shots 5000 gal HCL & 130000 lbs TLC 30/50 23' /69 shots Stage #7 9205 - 9477 5000 gal HCL & 150000 lbs TLC 30/50 Stage #6 9510 - 9781 23' /69 shots

5000 gal HCL & 140000 lbs TLC 30/50 Stage #5 9813 - 10073 22' /66 shots 5000 gal HCL & 140000 lbs TLC 30/50 Stage #4 10135 - 10460 23' /69 shots 5000 gal HCL & 150000 lbs TLC 30/50 Stage #3 10498 - 10814 23' /69 shots 5000 gal HCL & 145000 lbs Power Prop 20/40 Stage #2 10848 - 11166 23' /69 shots 5000 gal HCL & 155000 lbs Power Prop 20/40 Stage #1 11194 - 11494 23' /69 shots

5000 gal HCL & 145000 lbs Power Prop 20/40

Well Name: Paulsen 2-15C5



Proposed Future Recom Wellbore Schematic (After Extended Stage 4 Test)

Company Name: EP Energy Krug By: Field, County, State: Altamont, Duchesne, UT TD: 11,698 Surface Location: Lat: 40°13'29.635" N Long: 110°26'21.721" W 43013528420000 Producing Zone(s): Wasatch 13-3/8" 54.5# J-55 STC @ 630 ft. MD 9-5/8" 40# N-80 LTC @ 1716 ft. MD **Estimated TOC at:** 4,040 ft MD July 2016 Recom Squeezed STG 3; Volumes TBD STG 4: 7,951' - 8,030' (16'/48 holes) 10,180 gals HCl STG 3: 8,308' - 8,333' (10'/30 holes) **SQUEEZED** Top of Liner at: 8,684 ft MD 7,472 gals HCl 7" 29# HCP-110 LTC @ 8930 ft. MD STG 2: 8,423' - 8,570' (20'/60 holes) 8,469 gals HCl + 6,040 lbs 100<u>M</u> + 84,120 lbs 30/50 Drift ID = 6.059" STG 1: 8,718' - 8,862' (21'/63 holes) Liner TOC @ 8684 ft 9,049 gals HCl + 4,900 lbs 100M + 81,100 lbs 30/50 CBP @ 8,905' w/ 15' CMT **Initial Completion Perf Information** Stage #8 8940 - 9179 23' /69 shots 5000 gal HCL & 130000 lbs TLC 30/50 Stage #7 9205 - 9477 23' /69 shots 5000 gal HCL & 150000 lbs TLC 30/50 Stage #6 9510 - 9781 23' /69 shots 5000 gal HCL & 140000 lbs TLC 30/50 Stage #5 9813 - 10073 22' /66 shots 5000 gal HCL & 140000 lbs TLC 30/50 Stage #4 10135 - 10460 23' /69 shots 5000 gal HCL & 150000 lbs TLC 30/50 Stage #3 10498 - 10814 23' /69 shots 5000 gal HCL & 145000 lbs Power Prop 20/40 Stage #2 10848 - 11166 23' /69 shots 5000 gal HCL & 155000 lbs Power Prop 20/40 PBTD @ 11,612' Stage #1 11194 - 11494 23' /69 shots 5000 gal HCL & 145000 lbs Power Prop 20/40 5" 18# HCP-110 STL @ 8684 - 11700 ft. MD

8/25/2016

Last Updated:

Drift ID = 4.151"

				ST ARTMEN SION O		ATURA	L RESC		, L S	COMF	PLETION	(hi	ghlight c	REPORT :: changes)	
WELI	L CO	MPLE	TION	N OR I	RECO	MPL	ETIC	ON RI	EPOF	RT ANI	DLOG	6. II	F INDIAN, A	ALLOTTEE OR TE	RIBE NAME
1a. TYPE OF WELL:			OIL WELL		GAS WELL		DRY		ОТН	ER		7. U	JNIT or CA	AGREEMENT NA	ME
b. TYPE OF WORK	í: HORIZ. [LATS. [DEEP- [RE- ENTRY		DIFF. RESVR.		ОТН	8. V	WELL NAME and NUMBER:				
2. NAME OF OPERA						<u> </u>						9. A	API NUMBE	ER:	
3. ADDRESS OF OP	ERATOR:		CITY			STATE	<u> </u>	ZIP		PHONE	NUMBER:	10 F	TELD AND	POOL, OR WILD	CAT
4. LOCATION OF W AT SURFACE:	ELL (FOOT	TAGES)								•		11.	QTR/QTR, MERIDIAN	, SECTION, TOWN	NSHIP, RANGE,
AT TOP PRODUC	CING INTE	RVAL REP	ORTED E	BELOW:									U.S.B.		40. 07475
AT TOTAL DEPT	H:											12.	COUNTY		13. STATE UTAH
14. DATE SPUDDED):	15. DATE	T.D. RE.	ACHED:	16. DATI	COMPL	ETED:	ļ	ABANDON	ED	READY TO PROD	UCE	17. ELE\	/ATIONS (DF, RK	B, RT, GL):
18. TOTAL DEPTH:	MD TVD			19. PLUG	BACK T.D	D.: MD			20. IF I	MULTIPLE C	OMPLETIONS, HO	W MANY? *		TH BRIDGE MI UG SET:	
22. TYPE ELECTRIC						by of eacr				WAS DST	L CORED? RUN? NAL SURVEY?	NO NO		/ES (Sul	omit analysis) omit report) omit copy)
HOLE SIZE	SIZE/G	RADE	WEIG	HT (#/ft.)	TOP (MD)	вотто	OM (MD)		CEMENTER EPTH	CEMENT TYPE 8 NO. OF SACKS		RRY IE (BBL)	CEMENT TOP *	* AMOUNT PULLED
25. TUBING RECOR	RD														
SIZE	DEPTI	H SET (MD) PA	CKER SET (MD)	SIZE		DEPTH	SET (MD)	PACKE	R SET (MD)	SIZE	D	EPTH SET (MD)	PACKER SET (MD)
26. PRODUCING IN	TERVALS		•		=			•		27. PERFO	RATION RECORD		•		
FORMATION (A)	NAME	TC	P (MD)	BOTTO	OM (MD)	TOP	(TVD)	вотто	M (TVD)	INTERVA	AL (Top/Bot - MD)	SIZE	NO. HOL	Open Open	Squeezed Squeezed
(B)														Open	Squeezed
(C)														Open	Squeezed Squeezed
(D)														Open	Squeezed
28. ACID, FRACTUR	RE, TREAT	MENT, CE	MENT SC	UEEZE, ET	c.			<u> </u>				1	<u> </u>	<u> </u>	<u> </u>
DEPTH I	NTERVAL								AM	OUNT AND T	TYPE OF MATERIA	-			
29. ENCLOSED ATT	ACHMENT	rs:												30. WE	LL STATUS:
	RICAL/MEC			ND CEMEN	Γ VERIFIC <i>i</i>	ATION	=	GEOLOGI CORE AN		=	DST REPORT OTHER:	DIREC	CTIONAL S	URVEY	

(CONTINUED ON BACK)

(5/2000)

31. INITIAL PRO	ODUCTION				INT	ERVAL A (As sho	wn in item #26)						
DATE FIRST PR	ODUCED:	TEST DA	TE:		HOURS TESTER	D:	TEST PRODUCTION RATES: →	N	OIL – BBL:	GAS – MCF:	WATER -	- BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PR	ESS. API GR	AVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTIC RATES: →	NC	OIL – BBL:	GAS – MCF:	WATER -	- BBL:	INTERVAL STATUS:
			<u> </u>		INT	ERVAL B (As sho	wn in item #26)			<u>'</u>			•
DATE FIRST PR	ODUCED:	TEST DA	TE:		HOURS TESTER	TEST PRODUCTION RATES: →		OIL – BBL:	GAS - MCF:	WATER -	- BBL:	PROD. METHOD:	
CHOKE SIZE:	TBG. PRESS.	CSG. PR	ESS. API GR	AVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTIC RATES: →	NC	OIL – BBL:	GAS - MCF:	WATER -	- BBL:	INTERVAL STATUS:
					INT	ERVAL C (As sho	wn in item #26)						
DATE FIRST PR	ODUCED:	TEST DA	TE:		HOURS TESTER	D:	TEST PRODUCTION RATES: →	Ŋ	OIL – BBL:	GAS – MCF:	WATER -	- BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PR	ESS. API GR	AVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTIC RATES: →	NC	OIL – BBL:	GAS – MCF:	WATER -	- BBL:	INTERVAL STATUS:
		I.			INT	ERVAL D (As sho	wn in item #26)						•
DATE FIRST PR	ODUCED:	TEST DA	TE:		HOURS TESTER	D:	TEST PRODUCTION RATES: →	N	OIL – BBL:	GAS - MCF:	WATER -	- BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PR	ESS. API GR	AVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	NC	OIL – BBL:	GAS – MCF:	WATER -	- BBL:	INTERVAL STATUS:
32. DISPOSITIO	ON OF GAS (So	d, Used for F	uel, Vented, Etc	:.)	I				I.	•			•
33. SUMMARY	OF POROUS Z	ONES (Includ	e Aquifers):					34.	. FORMATION	(Log) MARKERS:			
			ents thereof: Core nd shut-in pressu			n tests, including de	epth interval						
Formation	on	Top (MD)	Bottom (MD)		Descrip	otions, Contents, etc	: .			Name		(1	Top Measured Depth)
35. ADDITIONA	L REMARKS (I	nclude pluggi	ing procedure)	-			-				•		
36. I hereby cer	rtify that the for	egoing and a	ttached informa	ition is c	omplete and corr	ect as determined	from all available re	cor	rds.				
NAME (PLEAS	SE PRINT)						TITLE						
SIGNATURE													

This report must be submitted within 30 days of

- completing or plugging a new well
- drilling horizontal laterals from an existing well bore
- recompleting to a different producing formation
- reentering a previously plugged and abandoned well
- significantly deepening an existing well bore below the previous bottom-hole depth
- drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests

** ITEM 24: Cement Top – Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

Send to: Utah Division of Oil, Gas and Mining

1594 West North Temple, Suite 1210

Box 145801

Salt Lake City, Utah 84114-5801

Phone: 801-538-5340

Fax: 801-359-3940

(5/2000)

^{*} ITEM 20: Show the number of completions if production is measured separately from two or more formations.

Attachment to Well Completion Report

	Form 8 Dat	ed: _
Well Name:	_	

Items #27 and #28 Continued

27. Perforation Record

Interval (Top/Bottom-MD)	Hole Size	No. of Holes	Perf. Status

28. Acid, Fracture, Treatment, Cement Squeeze, Etc.

Depth Interval	Amount and Type of Material

CENTRAL DIVISION

ALTAMONT FIELD
PAULSEN 2-15C5
PAULSEN 2-15C5
RECOMPLETE LAND

Operation Summary Report

Disclaimer: Although the information contained in this report is based on sound engineering practices, the copyright owner (s) does (do) not accept any responsibility whatsoever, in negligence or otherwise, for any loss or damage arising from the possession or use of the report whether in terms of correctness or otherwise. The application, therefore, by the user of this report or any part thereof, is solely at the user's own risk.

CENTRAL DIVISION

1 General

Customer Information 1.1

Company	CENTRAL DIVISION
Representative	
Address	

1.2 **Well Information**

Well	PAULSEN 2-15C5			
Project	ALTAMONT FIELD	Site	PAULSEN 2-15C5	
Rig Name/No.		Event	RECOMPLETE LAND	
Start date	7/8/2016	End date	7/28/2016	
Spud Date/Time	7/13/2014	UWI	PAULSEN 2-15C5	
Active datum	KB @5,929.9usft (above Mean Sea Le	evel)	•	
Afe	166937/56324 / PAULSEN 2-15C5			
No./Description				

2 Summary

2.1 **Operation Summary**

Date		Time art-End	Duration (hr)	Phase	Activit y Code	Sub	OP Code	MD from (usft)	Operation
7/14/2016	17:00	18:30	1.50	MIRU	01		Р		HELD SAFETY MEETING ON RIGGING UP. SLID ROTA-FLEX, MIRU CO-ROD RIG WHILE PUMPING 60 BBLS DOWN CSG.
	18:30	20:30	2.00	PRDHEQ	18		Р		UNABLE TO UNSEAT WHILE PUMPING 70 BBLS DOWN CSG, RELEASED FROM ON-OFF TOOL.
	20:30	23:00	2.50	PRDHEQ	39		Р		TOOH W/ 910'-18/16", 850'-17/16", 1075'-16/16", 6500'-15/16", 1365'-16/16" AND ON OFF TOOL. LEFT WELL OPEN TO TREATER. SDFN.
7/15/2016	6:00	7:30	1.50	RDMO	28		Р		CREW TRAVEL HELD SAFETY MEETING ON RIGGING DOWN FILLED OUT AND REVIEW JSA.
	7:30	8:00	0.50	RDMO	02		P		RD CO ROD RIG,
	8:00	10:30	2.50	MIRU	01		Р		MIRU SERVICE RIG. WHILE PUMPING 100 BBLS 2% KCL DOWN CSG.
	10:30	12:30	2.00	WLWORK	21		Р		RU WIRELINE RIH PERFORATED TBG 10604' RD WIRELINE. WHILE PUMPING 100 BBLS 2% KCL DOWN CSG.
	12:30	14:30	2.00	WHDTRE	16		P		FLUSHED TBG W/ 60 BBLS 2% KCL. CSG BARRIER 1 FLUID, TBG BARRIER 1 FLUID, BARRIER 2 TIW VALVE. ND WELLHEAD. INSTALLED 4'-2 7/8 PERF SUB AND HANGER W/ 2WC LANDED TBG. NU BOPE AND PRESS TEST @ 400 PSI LOW AND 4000 PSI HIGH.
	14:30	18:30	4.00	WOR	39		Р		RELEASED ARROWSET TPYE TAC, TAC WOULD COME UP BUT NOT DOWN. PULLED TAC OUT OF LINER W/ 60-JTS 2 7/8 L-80 EUE TBG, RU SCANNERS TOOH 70- JTS 2 7/8 L-80 EUE TBG, RIH W/ 60-JTS 2 7/8 L-80 EUE TBG CONTINUED SCANNING TBG. TOOH W/ 77-JTS 2 7/8 L-80 EUE TBG. TTL 137-JTS 2 7/8 L-80 EUE TBG, 124-YELLOW, 12-BLUE AND 1-RED. EOT @ 6320'. CLOSED IN WELL. TBG BARRIER 1 TIW VALVE, BARRIER 2 NIGHT CAP. CLOSED AND LOCKED PIPE RAMS LEFT CSG OPEN TO TREATER.
7/16/2016	6:00	7:30	1.50	WOR	28		Р		CREW TRAVEL HELD SAFETY MEETING ON SCANNING TUBING. FILLED OUT AND REVIEWED JSA.
	7:30	11:00	3.50	WOR	39		Р		50 TSIP 50 CSIP. BLED DOWN WELL. RU SCANNERS CONTINUE SCANNING TBG. SCANNED 123-JTS 2 7/8 L-80 EUE TBG 110-YELLOW, 11-BLUE, 2-RED. RD SCANNERS LD 66-JTS 2 3/8 L-80 EUE TBG, 5" ARROWSET TPYE TAC, 4-JTS 2 3/8 L-80 EUE TBG AND BHA.

CENTRAL DIVISION

Date	-	Time	Duration	Phase	Activit	Sub	OP	MD from	Operation
		art-End	(hr)		y Code		Code	(usft)	4
	11:00	15:30	4.50	WLWORK	26		Р		RU WIRLINE TESTED BOP AND LUBRICATOR @ 4000 PSI. RIH W/ 5.90 GR/JB TO LINER TOP @ 8684'. RIH W/ 4.00 GR/JB TO 8927'. RIH SET 15K MAGNUM CBP @ 8905', RIH DUMP BAILED 15' CEM. RD WIRELINE. CLOSED IN WELL BARRIER 1 CBP. BARRIER 2 CLOSED AND LOCKED BLIND RAMS. SDFN.
7/17/2016	6:00	6:00	24.00	WOR	18		Р		NO ACTIVITY
7/18/2016	6:00	6:00	24.00	WOR	18		Р		NO ACTIVITY
7/19/2016	6:00	8:30	2.50	WHDTRE	28		Р		CREW TRAVEL HELD SAFETY MEETING ON NIPPLING DOWN BOPE. FILLED OUT AND REVIEWED JSA.
	8:30	14:30	6.00	WHDTRE	16		Р		INSTALLED HANGER W/ TWC IN TBG HEAD. BARRIER 1 CBP, BARRIER 2 TWC. ND BOP. NU 7" MANUAL FRAC VALVE. AND SHELL TESTED @ 8500 PSI. PRESSURE TEST CSG @ 8000 PSI FOR 1/2 HR. NIPPLE UP 7" HCR, GOAT HEAD, 7" HCR AND WIRELINE ADAPTER AND PRESSURE TEST FRAC VALVES @ 9500 PSI. PRESSURE TEST FLOWBACK LINES @ 8000 PSI. HELD.
	14:30	16:30	2.00	STG01	21		Р		RU WIRELINE. RIH PERFORATED STAGE # 1 FROM 8862' TO 8718'. ALL PERFS CORRELATED TO PERFORATORS RADIAL SECTOR CBL, GAMMA RAY, CCL LOG RUN #1 DATED 08/08/14. 21 NET FT. 63 SHOTS. USING 3 1/8" GUNS, 22.7 GM CHARGES, 3 SPF, 120 PHASING. STARTING PRESSURE 1000 PSI. FINAL PRESSURE 600 PSI. RD WIRELINE SHUT IN WELL, CLOSED AND LOCKED BARRIER 1 LMV, BARRIER 2 UMV CLOSED CSG VALVES AND INSTALLED NIGHT CAPS.
7/20/2016	6:00	6:30	0.50	SITEPRE	28		Р		HELD SAFETY MEETING ON HEATING FRAC WATER. FILLED OUT AND REVIEW JSA
	6:30	16:30	10.00	SITEPRE	18		Р		HEAT 9000 BBLS WATER
7/21/2016	9:00	19:00	10.00	MIRU	42		Р		HELD SAFETY MEETING ON MOVING FRAC EQUIPMENT. FILLED OUT AND REVIEWED JSA, MIRU FRAC EQUIPMENT.
7/22/2016	6:00	7:30	1.50	STG01	28		Р		CREW TRAVEL HELD SAFETY MEETING ON PUMPING HIGH PRESSURE. FILLED OUT AND REVIEWED JSA.
	7:30	8:30	1.00	STG01	18		Р		SET POPOFF @ 8335 PSI. PRESSURE TEST LINES @ 9000 psi
	8:30	11:00	2.50	STG01	35		P		OPENED UP WELL W/ 450 PSI. BREAK DOWN STAGE #1 PERFS @ 3846 PSI, 9.7 BPM. TREATED PERFS W/ 9049 GALS 15% HCL ACID. FLUSHED TO BTM PERF W/ 331 BBLS. AVG RATE 39.9 BPM. MAX RATE 42. AVG PRESS 3740 PSI, MAX PRESS 3954 PSI. STEP RATE TEST SHOWED 23 PERFS OPEN. ISIP 2347, F.G700. 5 MIN 2020 PSI, 10 MIN 1925 PSI, 15 MIN 1531 PSI.PUMPED 4900 LBS 100 MESH IN 1/2 PPG STAGE AND 81,100 LBS WHITE 30/50. IN .5#, 1#, 1.75# AND 2.5# STAGES. AVG RATE 75 BPM, MAX RATE 76.3 BPM. AVG PRESS 3855 PSI, MAX PRESS 4589 PSI. I.S.I.P. 3027 PSI. F.G777, 5 MIN 2480 PSI, 10 MIN 2253 PSI. SHUT WELL IN 3479 BBLS TO RECOVER. TURNED WELL OVER TO WIRELINE. RU WIRELINE. RIH SET CBP @ 8585' W/ 1300 PSI
	11.00	13.30	2.50	S1G02	21		۲		PERFORATED STAGE # 2 FROM 8570' TO 8423'. ALL PERFS CORRELATED TO PERFORATORS RADIAL SECTOR CBL, GAMMA RAY, CCL LOG RUN #1 DATED 08/08/14. 20 NET FT. 60 SHOTS. USING 3 1/8" GUNS, 22.7 GM CHARGES, 3 SPF, 120 PHASING. STARTING PRESSURE 1300 PSI. FINAL PRESSURE 1000 PSI. RD WIRELINE. TURNED WELL OVER TO FRAC CREW.

Date		Γime art-End	Duration (hr)	Phase	Activit y Code	Sub	OP Code	MD from (usft)	Operation
	13:30	15:30	2.00	STG02	35		P	(activ)	OPENED UP WELL W/ 400 PSI. BREAK DOWN STAGE # 2 PERFS @ PSI, 9.7 BPM. TREATED PERFS W/ 8469 GALS 15% HCL ACID. FLUSHED TO BTM PERF W/ 323 BBLS. AVG RATE 39.9 BPM. MAX RATE 40.1. AVG PRESS 2347 PSI, MAX PRESS 2635 PSI. STEP RATE TEST SHOWED 57 PERFS OPEN. ISIP 1820, F.G647. 5 MIN 1608 PSI, 10 MIN 1509 PSI, 15 MIN 1353 PSI.PUMPED 6040 LBS 100 MESH IN 1/2 PPG STAGE AND 84120 LBS WHITE 30/50. IN .5#, 1#, 1.75# AND 2.5# STAGES. AVG RATE 75.4 BPM, MAX RATE 77.7 BPM. AVG PRESS 3145 PSI, MAX PRESS 3622 PSI. I.S.I.P. 2825 PSI. F.G765, 5 MIN 2454 PSI, 10 MIN 2247 PSI. SHUT WELL IN 3329 BBLS TO RECOVER. TURNED WELL OVER TO WIRELINE.
	15:30	17:30	2.00	STG03	21		Р		RU WIRELINE. RIH SET CBP @ 8348' W/ 1700 PSI PERFORATED STAGE # 3 FROM 8333' TO 8308'. ALL PERFS CORRELATED TO PERFORATORS RADIAL SECTOR CBL, GAMMA RAY, CCL LOG RUN #1 DATED 08/08/14. 10 NET FT. 30 SHOTS. USING 3 1/8" GUNS, 22.7 GM CHARGES, 3 SPF, 120 PHASING. STARTING PRESSURE 1700 PSI. FINAL PRESSURE 600 PSI. RD WIRELINE TRNED WELL OVER TO FRAC CREW.
	17:30	18:30	1.00	STG03	35		Р		OPENED WELL W/ 200 PSI. BREAK DOWN STAGE # 3 PERFS @ 2375 PSI 40.6 BPM. STEP RATE TEST SHOWED 21 OPEN PERFS. I.S.I.P. 1179 PSI F.G575. 5 MIN 720 PSI, 10 MIN 643 PSI, 15 MIN 603 PSI. TREATED PERFS W/ 7472 GALS 15% HCL ACID.DROPPED 36 BIO BALLS. 18 EVERY 1700 GALS. AVG RATE 38.8 BPM, MAX RATE 44.5 BPM. AVG PRESS 2819 PSI, MAX PRESS 7889 PSI. I.S.I.P. 1367 PSI, F.G597. 5 MIN 903 PSI, 10 MIN 785 PSI, SHUT IN WELL. 573 BBLS TO RECOVER. TURNED WELL OVER TO WIRELINE.
	18:30	21:00	2.50	STG04	21		Р		RU WIRELINE. RIH SET CBP @ 8045' W/ 500 PSI PERFORATED STAGE # 4 FROM 8030' TO 7951'. ALL PERFS CORRELATED TO PERFORATORS RADIAL SECTOR CBL, GAMMA RAY, CCL LOG RUN #1 DATED 08/08/14. 16 NET FT. 48 SHOTS. USING 3 1/8" GUNS, 22.7 GM CHARGES, 3 SPF, 120 PHASING. STARTING PRESSURE 500 PSI. FINAL PRESSURE 300 PSI. SHUT IN WELL, BARRIER 1 LMV, BARRIER 2 UMV CLOSED CSG VALVES AND INSTALLED NIGHT CAPS.
7/23/2016	6:00	9:00	3.00	STG04	42		P		WAIT ON FRAC CREW.
	9:00	10:00	1.00	STG04	28		Р		HELD SAFETY MEETING ON PRESSURE TESTING LINES. FILLED OUT AND REVIEWED. STARTED FRAC EQUIPMENT.
	10:00	10:40	0.67	STG04	35		Р		OPENED WELL W/ 470 PSI. BREAK DOWN STAGE # 4 PERFS @ 3682 PSI 20.3 BPM. STEP RATE TEST SHOWED 24 OPEN PERFS. I.S.I.P. 1283 PSI F.G594. 5 MIN 703 PSI, 10 MIN 520 PSI, 15 MIN 420 PSI. TREATED PERFS W/ 10180 GALS 15% HCL ACID.DROPPED 60 BIO BALLS. 20 EVERY 2250 GALS. AVG RATE 41.5 BPM, MAX RATE 53.5 BPM. AVG PRESS 2448 PSI, MAX PRESS 7623 PSI. I.S.I.P. 1324 PSI @ 10:30 , F.G594. 5 MIN 1136 PSI, 10 MIN 993 PSI, SHUT IN WELL. 557 BBLS TO RECOVER.
	10:40	13:30	2.83	RDMO	02		Р		RIG DOWN FRAC EQUIPMENT AND MOVE OFF LOCATION. ND WIRELINE FLANGE, TOP HCR VALVE AND GOAT HEAD, LEFT LMV BARRIER 1, UMV BARRIER 2, INSTALLED NIGHT CAP, BARRIER 3.
	13:30	15:30	2.00	FB	19		Р		OPENED WELL @ 13:30. 450 PSI ON 12/64 CHOKE. WELLDIED @ 3:30 CLOSED IN FLOW LINE. CLOSED ALL VALVES.
7/24/2016	6:00	7:30	1.50	WOR	28		Р		CREW TRAVEL HELD SAFETY MEETING ON NIPPLING DOWN FRAC VALVE. FILLED OUT AND REVIEWED JSA.

CENTRAL DIVISION

Date		ime	Duration (hr)	Phase	Activit y Code	Sub	OP Code	MD from (usft)	Operation
	7:30	11:30	4.00	WHDTRE	16		Р	(250 CSIP OPENED WELL. FLOW@ 10 BBLS H2O. WELLDIED. BARRIER 1 FLUID, BARRIER 2 LMV. ND HCR VALVE, LEAVING 7" MANUAL . NU 5M BOP, 5M HYDRIL AND PRESSURE TEST LOW 250 PSI, HIGH 4800 PSI.
	11:30	13:00	1.50	WOR	06		Р		PUMPED 100 BBLS 10# BRINE.@ 3 BPM @ 1200 PSI. ISIP 750 PSI. 15 MIN 200 PSI. OPENED WELL FLOWED BACK 20 BBLS WELL DIED.
	13:00	15:30	2.50	WOR	10		Р		TALLIED AND RIH W/ 6" BIT, BIT SUB AND 247-JTS 2 7/8 L-80 EUE TBG.TAGGED CBP @ 8045 (8050' TBG TALLY), RU POWER SWIVEL, STIFF ARM TO LONG, TOOH W/ 8-JTS 2 7/8 L-80 EUE TBG, CLOSED IN WELL, CSG BARRIER 1 PIPE RAMS, BARRIER 2 HYDRIL, TBG BARRIER 1 TIW VALVE, BARRIER 2 NIGHT CAP, CLOSED CSG VALVES AND INSTALLED NIGHT CAPS,
7/25/2016	6:00	7:30	1.50	WOR	28		Р		CREW TRAVEL HELD SAFETY MEETING ON DRILLING PLUGS FILLED OUT AND REVIEWED JSA.
	7:30	8:30	1.00	WOR	39		Р		350 TSIP, 350 CSIP. BLED DOWN WELL, RIH W/ 8 JTS 2 7/8 L-80 RURTBG TAGGED CBP @ 8050' RU POWER SWIVEL.
	8:30	16:00	7.50	WOR	10		Р		BREAK CIRCULATION DRILLED OUT CBP SET @ 8050' CIRCULATE TBG CLEAN, CONTINUED IN DRILLED OUT CBP @ 8353 CIRCULATE TBG CLEN., CONTINUED IN TAGGED REMAINS OF CBP AND SAND @ 8560' FINISHED DRILLING CBP AND WASHED SAND DOWN TO CBP @ 8590' DRILLED OUT CBP. CONITINUE IN FINISHED DRILLING CBP ON LINER TOP @ 8684' CIRCULATE TBG CLEAN.
	16:00	17:00	1.00	WOR	39		Р		RD POWER SWIVEL. TOOH W/ 26-JTS 2 7/8 L-80 EOT @ 7848'. CLOSED IN WELL, CSG BARRIER 1 PIPE RAMS, BARRIER 2 HYDRIL, TBG BARRIER 1 TIW VALVE, BARRIER 2 NIGHT CAP, CLOSED CSG VALVES AND INSTALLED NIGHT CAPS. SDFN.
7/26/2016	6:00	8:30	2.50	WOR	28		Р		CREW TRAVEL. HELD SAFETY MEETING ON POWER SWIVEL. FILLED OUT AND REVIEWED JSA.
	8:30	10:00	1.50	WOR	06		Р		0 TSIP, 150 CSIP. OPENED WELL CSG FLOW @ 25 PSI 1 BPM. CIRCULATE WELL W/ 300 BBLS 10# BRINE. WELL DIED.
	10:00	15:00	5.00	WOR	39		Р		TOOH W/ 240-JTS 2 7/8 L-80 EUE TBG. BIT SUB AND 6" BIT, RIH W/ 4 1/8 BIT, BIT SUB, 10-JTS 2 3/8 L-80 EUE TBG, X-OVER AND 253-JTS2 7/8 L-80 EUE TBG. TAGGED LINER TOP @ 8689. RU POWER SWIVEL.
	15:00	18:00	3.00	WOR	10		Р		PUMPED 50 BBLS BREAK REVERSE CIRCULATION DRILLED REMAINS OF CBP, CONTINUED RIH TAGGED SAND @ @ 8865' WASHED SAND DOWN TO 8895' TBG PLUGGED UP. UNABLE TO PUM[P DOWN TBG @ 2500 PSI, RD POWER SWIVEL
	18:00	19:00	1.00	WOR	39		Р		LD 13-JTS 2 7/8 L-80 EUE TBG. CLOSED IN WELL. CSG BARRIER 1 PIPE RAMS, BARRIER 2 HYDRIL, TBG BARRIER 1 TIW VALVE, BARRIER 2 NIGHT CAP, CLOSED CSG VALVES AND INSTALLED NIGHT CAPS. SDFN.
7/27/2016	6:00	7:30	1.50	WOR	28		Р		CREW TRAVEL HELD SAFETY ON PERFORATING TUBING. FILLED OUT AND REVIEWED JSA.
	7:30	9:30	2.00	WLWORK	21		Р		0 TSIP, 100 CSIP OPENED CSG WELL FLOWING 1 BPM @ 25 PSI. RU WIRELINE RIH UNABLE TO GET PAST 6885'. PUT 500 PSI ON TBG. PERFORATED TBG @ 6815' RD WIRELINE. CIRCULATE WELL W/ 250 BBLS 10 # BRINE.
	9:30	12:00	2.50	WOR	39		Р		TOOH W/240-JTS 2 7/8 L-80 EUE TBG, X-OVER, 10-JTS 2 /38 L-80 EUE TBG, BIT SUB AND 4 1/8 BIT. BTM 5-JTS 2 3/8 PLUGGED W/ SAND,

Date		ime rt-End	Duration (hr)	Phase	Activit y Code	Sub	OP Code	MD from (usft)	Operation
	12:00	16:00	4.00	WOR	39		P	()	RIH W/ 5 3/4 NO-GO, 2-JTS 2 7/8 L-80 EUE TBG, 5 1/2 PBGA, 4' 2 7/8 N-80 EUE TBG SUB, 2'-2 7/8 N-80 EUE TBG SUB, MECH SN, 2 7/8" X 2 1/4" X 40' PUMP BARREL, 4' 2 7/8 N-80 EUE TBG SUB, 4-JTS 2 7/8 L-80 EUE TBG, 7" TAC, 38-JTS 2 7/8 L-80 EUE TBG, 2'-2 7/8 N-80 EUE TBG SUB, 6-JTS 2 7/8 L-80 TK-900 EUE TBG, 2'-2 7/8 N-80 EUE TBG SUB, 114-JTS 2 7/8 L-80 EUE TBG, 2'-2 7/8 N-80 EUE TBG SUB, 10-JTS 2 7/8 L-80 TK-900 EUE TBG, 2'-2 7/8 N-80 EUE TBG SUB, 10-JTS 2 7/8 L-80 TK-900 EUE TBG, 2'-2 7/8 N-80 EUE TBG SUB AND 77-JTS 2 7/8 L-80 EUE TBG,
	16:00	18:30	2.50	WOR	16		Р		SET TAC @ 8032', SN 8209', EOT @ 8313'. TEMPORARILY LANDED T BG W/ 4' 27/8 TBG SUB AND HANGER. 8' TBG SUB W/ TIW VALVE. CSG BARRIER 1 KILL FLUID, BARRIER 2 HANGER, TBG BARRIER 1 KILL FLUID, BARRIER 2 TIW VALVE. ND HYDRIL, ND BOPAND FRAC VALVE.REMOVED SUBS AND HANGER. NU B-FLANGE, WELLHEAD AND FLOWLINES. CLOSED IN WELL CLOSED ALL CSG AND TBG VALVE.
	18:30	20:00	1.50	RDMO	02		Р		RD RIG AND GOT READY TO MOVE.
7/28/2016	6:00	7:30	1.50	MIRU	28		Р		CREW TRAVEL. HELD SAFETY MEETING ON RIGGING UP CO-ROD RIG. FILLED OUT AND REVIEWED JSA.
	7:30	8:00	0.50	MIRU	01		Р		MIRU CO-ROD RIG.
	8:00	10:30	2.50	PRDHEQ	06		Р		FLUSHED TBG W/ 50 BBLS KCL, 10 BBLS BRINE. DROPPED STANDING VALVE PUMPED 35 BBLS 10# BRINE, 10 GAL CORROSION INHIBITORAND 15 BBLS OF BRINE. STANDING VALVE DIDN'T SEAT.
	10:30	15:30	5.00	INARTLT	39		Р		RIH W/ 2 1/4" X 5" PLUNGER, 40' POLISH ROD, STAB SUB, 1365'- 15/16", 6382'-15/16" CUT OFF 2748'-15/16" LEAVING 3904' IN WELL.MADE WELD, CONTINUED RIH W/ 1072'-16/16", 845'-17/16", 820'-18/16, SPACED OUT WELL W/ 1-25' EL ROD,1-8', 1-6', 1-4',1-2' X 1" SUBS. PU POLISH ROD,FILLED TUBING W/ 4 BBLS PRESSURE AND STROKE TEST TBG AND PUMP @1000 PSI HELD.
	15:30	16:30	1.00	RDMO	02		Р		RD CO-ROD RIG. SLID IN ROTA-FLEX, PUT WELL ON PRODUCTION.
8/20/2016	10:30	12:30	2.00	MIRU	01		Р		MOVED RIG FROM THE 3-17A3 TO THE 2-15C5 MIRU CO-ROD RIG.
	12:30	15:30	3.00	UNINSTUB	39		Р		0 CSIP, 0 TSIP. OPENED WELL. FISHED STANDING VALVE, TOOH W/ CO-ROD, PLUNGER AND STANDING VALVE. RD CO-ROD RIG.
	15:30	19:00	3.50	MIRU	01		Р		MIRU SERVICE RIG. WELL DEAD, BARRIER 1 FLUID. ND WELLHEAD. INSTALLED PERFORATED SUB AND HANGER W/ TWC. NU 10M X 7 1/16 SPOOL, 10M 7 1/16 FRAC VALVE, 10M X 5M 7 1/16 SPOOL AND 5 M BOP, PRESSURE TEST @ 4000 HIGH AND 250 LOW HELD. CLOSED IN WELL, BARRIER 1 FLUID, BARRIER 2 PIPE RAMS, TBG BARRIER 1 TIW VLVE, BARRIER 2 NIGHT CAP. CLOSED CSG VALVES AND INSTALLED NIGHT CAPS BARRIER 1 AND 2. SDFN.
8/21/2016	6:00	7:30	1.50	WOR	28		Р		CREW TRAVEL. HELD SAFETY MEETING ON SWABBING. FILLED OUT AND REVIEWED JSA.
	7:30	13:30	6.00	WOR	38		Р		RU SWAB EQUIPMENT, MADE 27 SWAB RUNS RECOVERED 266 BBLS. STARTING FLUID LEVEL SURFACE, ENDING FLUID LEVEL SURFACE. RD SWAB EQUIPMENT.
	13:30	17:30	4.00	WOR	39		Р		TOOH WI 154-JTS 2 7/8 L-80 EUE TBG ;LD 10-JTS 2 7/8 TK-900 TBG.CLOSED IN WELL, CSG BARRIER 1 TBG HANGER, BARRIER 2 PIPE RAMS, TBG BARRIER 1 TIW VALVE, BARRIER 2 NIGHT CAP, CLOSED CSG VALVES AND INSTALLED NIGHT CAPS.
8/22/2016	6:00	6:00	24.00	WOR	18		Р		NO ACTIVITY
8/23/2016	6:00	7:30	1.50	WOR	28		Р		CREW TRAVEL HELD SAFETY MEETING ON TRIPPING TUBING.FILLED OUT AND REVIEWED JSA.
	7:30	9:00	1.50	WOR	39		Р		100 TSIP 150 CSIP. BLED DOWN WELL.TOOH W/ 97-JTS 2 7/8 L-80 EUE TBG ;LD 6-JTS 2 7/8 TK-900 TBG AND BHA

	FORM 9		
ι	5.LEASE DESIGNATION AND SERIAL NUMBER: Fee		
SUNDR	WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:	
Do not use this form for pro current bottom-hole depth, I FOR PERMIT TO DRILL form	7.UNIT or CA AGREEMENT NAME:		
1. TYPE OF WELL Oil Well			8. WELL NAME and NUMBER: Paulsen 2-15C5
2. NAME OF OPERATOR: EP ENERGY E&P COMPANY,	9. API NUMBER: 43013528420000		
3. ADDRESS OF OPERATOR: 1001 Louisiana, Houston,		ONE NUMBER:	9. FIELD and POOL or WILDCAT: ALTAMONT
4. LOCATION OF WELL FOOTAGES AT SURFACE:	,		COUNTY: DUCHESNE
0906 FNL 1814 FWL QTR/QTR, SECTION, TOWNSH Qtr/Qtr: NENW Section:	HIP, RANGE, MERIDIAN: 15 Township: 03.0S Range: 05.0W Meridiar	n: U	STATE: UTAH
11. CHECI	K APPROPRIATE BOXES TO INDICATE N	IATURE OF NOTICE, REPOR	T, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
	ACIDIZE	ALTER CASING	CASING REPAIR
NOTICE OF INTENT	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME
Approximate date work will start:		COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE
✓ SUBSEQUENT REPORT	CHANGE WELL STATUS		
Date of Work Completion: 8/31/2016	L DEEPEN L	FRACTURE TREAT	☐ NEW CONSTRUCTION
0/31/2010	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK
SPUD REPORT Date of Spud:	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION
Date of Spud.	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON
_	TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL
DRILLING REPORT Report Date:	☐ WATER SHUTOFF ☐	SI TA STATUS EXTENSION	APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	OTHER	OTHER: Squeezed Perfs, etc
Set CIBP @ 8362'	COMPLETED OPERATIONS. Clearly show all per and CCR @ 8250'. Squeezed St x Class G cement. See attache	tage 3 (8308'-8333')	Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY October 21, 2016
NAME (PLEASE PRINT) Maria S. Gomez	PHONE NUMBER 713 997-5138	TITLE Consultant	
SIGNATURE		DATE	
N/A		10/11/2016	

CENTRAL DIVISION

ALTAMONT FIELD
PAULSEN 2-15C5
PAULSEN 2-15C5
RECOMPLETE LAND

Operation Summary Report

Disclaimer: Although the information contained in this report is based on sound engineering practices, the copyright owner (s) does (do) not accept any responsibility whatsoever, in negligence or otherwise, for any loss or damage arising from the possession or use of the report whether in terms of correctness or otherwise. The application, therefore, by the user of this report or any part thereof, is solely at the user's own risk.

Date		ime -	Duration	Phase	Activit	Sub	OP	MD from	Operation
		rt-End	(hr)		y Code		Code	(usft)	
	12:00	16:00	4.00	WOR	39		Р		RIH W/ 5 3/4 NO-GO, 2-JTS 2 7/8 L-80 EUE TBG, 5 1/2 PBGA, 4' 2 7/8 N-80 EUE TBG SUB, 2'-2 7/8 N-80 EUE TBG SUB, MECH SN, 2 7/8" X 2 1/4" X 40' PUMP BARREL, 4' 2 7/8 N-80 EUE TBG SUB, 4-JTS 2 7/8 L-80 EUE TBG, 7" TAC, 38-JTS 2 7/8 L-80 EUE TBG, 2'-2 7/8 N-80 EUE TBG SUB, 6-JTS 2 7/8 L-80 TK-900 EUE TBG, 2'-2 7/8 N-80 EUE TBG SUB, 114-JTS 2 7/8 L-80 EUE TBG, 2'-2 7/8 N-80 EUE TBG SUB, 10-JTS 2 7/8 L-80 TK-900 EUE TBG, 2'-2 7/8 N-80 EUE TBG SUB AND 77-JTS 2 7/8 L-80 EUE TBG, 2'-2 7/8 N-80 EUE TBG SUB AND 77-JTS 2 7/8 L-80 EUE TBG,
	16:00	18:30	2.50	WOR	16		Р		SET TAC @ 8032', SN 8209', EOT @ 8313'. TEMPORARILY LANDED T BG W/ 4' 27/8 TBG SUB AND HANGER. 8' TBG SUB W/ TIW VALVE. CSG BARRIER 1 KILL FLUID, BARRIER 2 HANGER, TBG BARRIER 1 KILL FLUID, BARRIER 2 TIW VALVE. ND HYDRIL, ND BOPAND FRAC VALVE.REMOVED SUBS AND HANGER. NU B-FLANGE, WELLHEAD AND FLOWLINES. CLOSED IN WELL CLOSED ALL CSG AND TBG VALVE.
	18:30	20:00	1.50	RDMO	02		Р		RD RIG AND GOT READY TO MOVE.
7/28/2016	6:00	7:30	1.50	MIRU	28		Р		CREW TRAVEL. HELD SAFETY MEETING ON RIGGING UP CO-ROD RIG. FILLED OUT AND REVIEWED JSA.
	7:30	8:00	0.50	MIRU	01		Р		MIRU CO-ROD RIG.
	8:00	10:30	2.50	PRDHEQ	06		Р		FLUSHED TBG W/ 50 BBLS KCL, 10 BBLS BRINE. DROPPED STANDING VALVE PUMPED 35 BBLS 10# BRINE, 10 GAL CORROSION INHIBITORAND 15 BBLS OF BRINE. STANDING VALVE DIDN'T SEAT.
	10:30	15:30	5.00	INARTLT	39		Р		RIH W/ 2 1/4" X 5" PLUNGER, 40' POLISH ROD, STAB SUB, 1365'- 15/16", 6382'-15/16" CUT OFF 2748'-15/16" LEAVING 3904' IN WELL.MADE WELD, CONTINUED RIH W/ 1072'-16/16", 845'-17/16", 820'-18/16, SPACED OUT WELL W/ 1-25' EL ROD,1-8', 1-6', 1-4',1-2' X 1" SUBS. PU POLISH ROD,FILLED TUBING W/ 4 BBLS PRESSURE AND STROKE TEST TBG AND PUMP @1000 PSI HELD.
	15:30	16:30	1.00	RDMO	02		Р		RD CO-ROD RIG. SLID IN ROTA-FLEX, PUT WELL ON PRODUCTION.
8/20/2016	10:30	12:30	2.00	MIRU	01		Р		MOVED RIG FROM THE 3-17A3 TO THE 2-15C5 MIRU CO-ROD RIG.
	12:30	15:30	3.00	UNINSTUB	39		Р		0 CSIP, 0 TSIP. OPENED WELL. FISHED STANDING VALVE, TOOH W/ CO-ROD, PLUNGER AND STANDING VALVE. RD CO-ROD RIG.
	15:30	19:00	3.50	MIRU	01		Р		MIRU SERVICE RIG. WELL DEAD, BARRIER 1 FLUID. ND WELLHEAD. INSTALLED PERFORATED SUB AND HANGER W/ TWC. NU 10M X 7 1/16 SPOOL, 10M 7 1/16 FRAC VALVE, 10M X 5M 7 1/16 SPOOL AND 5 M BOP, PRESSURE TEST @ 4000 HIGH AND 250 LOW HELD. CLOSED IN WELL, BARRIER 1 FLUID, BARRIER 2 PIPE RAMS, TBG BARRIER 1 TIW VLVE, BARRIER 2 NIGHT CAP. CLOSED CSG VALVES AND INSTALLED NIGHT CAPS BARRIER 1 AND 2. SDFN.
8/21/2016	6:00	7:30	1.50	WOR	28		Р		CREW TRAVEL. HELD SAFETY MEETING ON SWABBING. FILLED OUT AND REVIEWED JSA.
	7:30	13:30	6.00	WOR	38		Р		RU SWAB EQUIPMENT, MADE 27 SWAB RUNS RECOVERED 266 BBLS. STARTING FLUID LEVEL SURFACE, ENDING FLUID LEVEL SURFACE. RD SWAB EQUIPMENT.
	13:30	17:30	4.00	WOR	39		Р		TOOH W/ 154-JTS 2 7/8 L-80 EUE TBG; LD 10-JTS 2 7/8 TK-900 TBG.CLOSED IN WELL, CSG BARRIER 1 TBG HANGER, BARRIER 2 PIPE RAMS, TBG BARRIER 1 TIW VALVE, BARRIER 2 NIGHT CAP, CLOSED CSG VALVES AND INSTALLED NIGHT CAPS.
8/22/2016	6:00	6:00	24.00	WOR	18		Р		NO ACTIVITY
8/23/2016	6:00	7:30	1.50	WOR	28		Р		CREW TRAVEL HELD SAFETY MEETING ON TRIPPING TUBING.FILLED OUT AND REVIEWED JSA.
	7:30	9:00	1.50	WOR	39		P		100 TSIP 150 CSIP. BLED DOWN WELL.TOOH W/ 97-JTS 2 7/8 L-80 EUE TBG ;LD 6-JTS 2 7/8 TK-900 TBG AND BHA

Date	Time Start-End		Duration (hr)	Phase	Activit y Code	Sub	OP Code	MD from (usft)	Operation		
	9:00	13:00	4.00	WOR	39		P	(usit)	TALLIED AND RIH W/ TS PLUG, ON-OFF TOOL, 4' 2 7/8 N-80 EUE TBG SUB, HD PKR, SN AND 247-JTS 2 7/8 L-80 EUE TBG SET PLUG @ 8090' SET PKR @ 8070' PRESSURE TEST PLUG @ 1500 PSI HELD, RELEASED PKR, TOOH W/ 5 JTS 2 7/8 L-80 EUE TBG SET PKR @ 7908.' PRESSURE TEST ANNULUS @ 1500 PSI HELD.		
	13:00	14:30	1.50	WOR	38		Р		RU SWAB EQUIPMENT. STARTING FLUID LEVEL SURFACE MADE 6 RUNS RECOVERED 60 BBLS.		
	14:30	16:00	1.50	FB	19		Р		WELL FLOWED BACK 45 BBLS IN 1 1/2 HRS. FIRST 1/2 HR MADE 20 BBLS,		
	16:00	19:00	3.00	WOR	38		Р		STARTED SWABBING, STARTING FLUID LEVEL SURFACE MADE RUNS 11, RECOVERED 82 BBLS. ENDING FLUID LEVEL 2500'. CLOSED IN WELL. CSG BARRIER 1 PKR, BARRIER 2 PIPE RAMS, TBG BARRIER 1 TIW VALVE, BARRIER 2 NIGHT CAP. CLOSED CSG VALVES AND INSTALLED NIGHT CAPS SDFN.		
8/24/2016	6:00	7:30	1.50	WOR	28		Р		CREW TRAVEL HELD SAFETY MEETING ON SWABBING. FILLED OUTAND REVIEWED JSA.		
	7:30	14:00	6.50	WOR	38		Р		STG 4. 900 PSI TSIP, BLED DOWN WELL ALL GAS NO FLUID. RU SWAB EQUIPMENT. STARTING FLUID LEVEL 750' MADE 21 RUNS. 3RD RUN FLUID LEVEL @ 2000' RECOVERED 200 BBLS FLUID LEVEL STAYED BETWEEEN 1600' AND 2200'. ENDING FLUID LEVEL 2200' 10 PERCENT OIL CUT.		
	14:00	17:30	3.50	WOR	20		Р		RD SWAB EQUIPMENT, RELEASED PKR SET @ 7908, RIH UNABLE TO RELEASE PLUG @ 8090' RELEASED FROM PLUG CIRCULATE WELL W/ 60 BBLS 2 % KCL. LATCHED ONTO PLUG AFTER SEVERAL ATTEMPTS PLUG RELEASED. RIH SET PLUG @ 8379'. PULLED UP SET PKR @ 8359', PRESSURE TEST PLUG @ 1500 PSI. HELD, LD 3-JTS SET PKR @ 8265'.		
	17:30	19:30	2.00	WOR	38		Р		RU SWAB EQUIPMENT STARTING FLUID LEVEL SURFACE MADE 8 RUNS RECOVERED 83 BBLS. FLUID LEVEL STAYED AT 400' TO 500'. ENDING FLUID LEVEL @ 500'. CLOSED IN WELL. CSG BARRIER 1 FLUID, BARRIER 2 PIPE RAMS, TBG BARRIER 1 TIW VALVE, BARRIER 2 NIGHT CAP. CLOSED CSG VALVES AND INSTALLED NIGHT CAPS BARRIERS 1 AND 2. SDFN.		
8/25/2016	6:00	8:00	2.00	WOR	28		Р		CREW TRAVEL HELD SAFETY MEETING ON SWABBING. FILLED OUT AND REVIEWED JSA.		
	8:00	9:00	1.00	WOR	19		Р		200 TSIP OPENED WELL WELL FLOWED 15 BBLS IN 30 MINS.		
	9:00	13:00	4.00	WOR	38		Р		RU SWAB EQUIPMENT.STARTING FLUID LEVEL SURFACE (STILL FLOWING) MADE 23 RUNS RECOVERED 246 BBLS. FLUID LEVEL STAYED BETWEEN 400' AND 500'. ENDING FLUID LEVEL @ 500'. OIL CUT. WHILE RD SWAB EQUIPMENT WELL STARTED FLOWING SAME RATE 15 IN 1/2HR. RELEASED PKR, PUMPED 10 BBLS BRINE DOWN TBG, TUBING DIED.		
	13:00	15:00	2.00	WOR	20		Р		RIH RELEASE PLUG @ 8378', CONTINUE RIH SET PLUG @ 8632' 264 JTS 2 7/8 L-80 EUE IN WELL, SET PKR @ 8612' PRESSURE TEST PLUG @ 1500 PSI HELD, RELEASED PKR TOOH W/ 7-JTS 2 7/8 L-80 EUE TBG. SET PKR @ 8390' RU SWAB EQUIPMENT.		
	15:00	18:00	3.00	WOR	38		Р		RU SWAB EQUIPMENT.STARTING FLUID LEVEL SURFACE MADE 9 RUNS RECOVERED 93 BBLS. FLUID LEVEL STAYED BETWEEN 500' AND 1100' 20 PERCENT OIL CUT. ENDING FLUID LEVEL @ 500'. CLOSED IN WELL. CSG BARRIER 1 FLUID, BARRIER 2 PIPE RAMS, TBG BARRIER 1 TIW VALVE, BARRIER 2 NIGHT CAP. CLOSED CSG VALVES AND INSTALLED NIGHT CAPS BARRIERS 1 AND 2. SDFN.		
8/26/2016	6:00	7:30	1.50	WOR	28		P		CREW TRAVEL HELD SAFETY MEETING ON SWABBING WELL. FILLED OUT AND REVIEWED JSA.		

	9:30 14:30	9:30 14:30	5.00 3.50	WOR	38	P P	(usft)	0 TSIP, 800 TSIP. OPENED WELL TO FLOW BACK TANK. STARTED FLOWING OIL. PLUMBED IN FLOWLINE TO TREATER. OPENED WELL TO TREATER FLOWED BACK 6 BBLS OF OIL. WELL DIED. OPEN WELL TO FLOWBACK TANK WELL DEAD. RU SWAB EQUIPMENT. STARING FLUID LEVEL SURFACE MADE 9 RUNS RECOVERD 110 BBLS FIRST 60 BBLS ALL WATER. FLUID LEVEL DROPPED TO 1700°, FLUID LEVEL STARTED RISING. LAST 50 BBLS 15 TO 20 PERCENT OIL
						Р		MADE 9 RUNS RECOVERD 110 BBLS FIRST 60 BBLS ALL WATER. FLUID LEVEL DROPPED TO 1700', FLUID LEVEL
-	14:30	18:00	3.50	WOR	00			CUT. WELL STARTED FLOWING. FLOWED 10 BBLS IN 1/2 HR THEN DIED. MADE 3 MORE RUNS RECOVERED 30 BBLS 20 PERCENT OIL CUT. FLUID LEVEL STAYED AT SURFACE. RD SWAB EQUIPMNET.
					20	Р		RELEASED PKR @ 8390' RIH WASHED DOWN TO PLUG. PLUG WAS CLEAN. CIRCULATE TBG CLEAN. TRIED TO RELEASE PLUG AFETR SEVERAL ATTEMPTS, RU PUMP LINES. CIRCULATE WELL WHILE TRYING TO RELEASE PLUG. STILL WOULDN'T RELEASE. QUIT CIRCULATING, TRIED TO RELEASE PLUG, AFTER SEVERAL ATTEMPT PLUG CAME FREE. TOOH SET PLUG @ 8410' AND PKR @ 8390' PRESSURE TEST PLUG @ 1500 PSI HELD.
	18:00	17:00		WOR	20	Р		TOOH SET PLUG @ 8410' AND PKR @ 8390' PRESSURE TEST PLUG @ 1500 PSI HELD. RELEASED PKR TOOH SET PKR @ 8264'. ESTABLISHED INJECTION RATE @ 3 BPM @ 600 PSI. RELEASED PKR AND PLUG TUBING TONGS BROKE DOWN EOT @ 8378'. CLOSED IN WELL. CSG BARRIER 1 FLUID, BARRIER 2 PIPE RAMS, TBG BARRIER 1 TIW VALVE, BARRIER 2 NIGHT CAP. CLOSED CSG VALVES AND INSTALLED NIGHT CAPS BARRIERS 1 AND 2. SDFN.SDFN.
8/27/2016	6:00	7:30	1.50	WOR	28	Р		CREW TRAVEL HELD SAFETY MEETING ON TRIPPING TUBING FILLED OUT AND REVIEWED JSA.
	7:30	9:00	1.50	WOR	39	Р		0 TSIP, 0 CSIP. TOOH W/ 161-JTS 2 7/8 L-80 EUE TBG EOT @ 2925'
	9:00	10:00	1.00	WOR	06	Р		CIRCULATE WELL WITH 120 BBLS HOT 2% KCL.
	10:00	11:00	1.00	WOR	39	Р		TOOH W/ 92-JTS 2 7/8 L-80 EUE TBG, SN, 7" HD PKR, 4' 2 7/8 N-80 EUE TBG SUB, ON-OFF TOOL AND 7" TS PLUG.
-	11:00	16:00	5.00	WLWORK	27	Р		MIRU WIRELINE RIH SET WEATHERFORD 7" CIBP @ 8362'. POOH, RIH SET HALLIBURTON 7" CCR @ 8250'. POOH RD WIRELINE
	16:00	18:00	2.00	WOR	39	Р		RIH W/ STINGER, SN AND 240-JTS 2 7/8 L-80 EUE TBG. EOT @ 7195' CLOSED IN WELL. CSG BARRIER 1 FLUID, BARRIER 2 PIPE RAMS, BARRIER 3 WASHINGTON RUBBER. TBG BARRIER 1 TIW VALVE, BARRIER 2 NIGHT CAP. CLOSED CSG VALVES AND INSTALLED NIGHT CAPS BARRIERS 1 AND 2. SDFN.
8/28/2016	6:00	6:00	24.00	WOR	18	Р		NO ACTIVITY
8/29/2016	6:00	6:00	24.00	WOR	18	Р		NO ACTIVITY
8/30/2016	6:00	8:30	2.50	WOR	28	Р		CREW TRAVEL HELD SAFETY MEETING ON PUMPING CEMENT. FILLED OUT AND REVIEWED JSA.
	8:30	10:30	2.00	WOR	06	Р		0 TSIP, 0 CSIP OPENED WELL RIH W/ 13-JTS 2 7/8 L-80 EUE TBG TTL 253-JTS. RU TBG SWIVEL. WASHED DOWN TO CCR @ 8250' TAGGED @ 8255 TBG TALLY, REVERED TBG CLEAN. RU HALLIBURTON TO PUMP CEMENT.
	10:30	14:30	2.00	WBREMD	05	P		PRESSURE TEST LINE @ 5000 PSI. PUMPED 15 BBLS FRESH WATER SPACER @ 700 PSI 3 BPM. PUMPED 20SKS CLASS G 15.8# 1.16 YEILD WITH 1% CALCIUM CHLORIDE, 120 SKS CLASS 15.8# 1.15 YIELD, DISPLACED W/ 47 BBLS, HESITATE 4 TIMES FOR TTL 30 MINS, WALKED PRESSURE UP TO 900 PSI STUNG OUT OF CCR. REVERSED TBG CLEAN W/ 96 BBLS. RD HALLIBURTON. TOOH W/ 253-JTS 2 7/8 L-80 EUE TBG, SN AND STINGER.

CENTRAL DIVISION

Date Time Start-End		Duration (hr)	Phase	Activit y Code	Sub	OP Code	MD from (usft)	Operation	
	16:30	18:30	2.00	WOR	39		Р		RIH W/ 5 3/4 NO-GO, 2-JTS 2 7/8 L-80 EUE TBG, 5 1/2 PBGA, 4' 2 7/8 N-80 EUE TBG SUB, 2'- 2 7/8 N-80 EUE TBG SUB, MECH SN, 2 7/8 X 2 1/4 X 40' TBG PUMP BARREL.4'- 2 7/8 L-80 EUE TBG SUB, 4-JTS 2 7/8 L-80 EUE TBG, 7" KLX TAC, 33-JTS 2 7/8 L-80 EUE TBG, 2'- 2 78 N-80 EUE TBG SUB, 6-JTS 2 7/8 TK-900 EUE TBG, 2'- 2 7/8 EUE TBG SUB AND 40-JTS 2 7/8 L-80 EUE TBG. EOT @ 3025', CLOSED IN WELL. CSG BARRIER 1 FLUID, BARRIER 2 PIPE RAMS, BARRIER 3 WASHINGTON RUBBER. TBG BARRIER 1 TIW VALVE, BARRIER 2 NIGHT CAP. CLOSED CSG VALVES AND INSTALLED NIGHT CAPS BARRIERS 1 AND 2. SDFN.
8/31/2016	6:00	7:30	1.50	WOR	28		Р		CREW TRAVEL HELD SFETY MEETING ON TRIPPING TUBING. FILLED OUT ND REVIEWED JSA.
	7:30	9:00	1.50	WOR	39		Р		0 TSIP, 0 CSIP. OPENED WELL RIH W/ 74-JTS 2 7/8 L-80 EUE TBG, 2'-2 7/8 N-80 EUE TBG SUB, 10-JTS 2 7/8 TK-900 EUE TBG, 2'-2 7/8 N-80 EUE TBG SUB ND 78-JTS 2 7/8 L-80 EUE TBG. TAGGED CEMENT @ 8259' TBG TALLY. LD 4-JTS 2 7/8 L-80 EUE TBG SET TAC @ 7875', SN @ 8053' AND EOT @ 8157'.
	9:00	10:30	1.50	WOR	16		Р		ND BOP, NU WELLHED AND FLOWLINE,
	10:30	13:00	2.50	RDMO	02		Р		RD RIG CLEANED LOCATION AND MOVED TO THE 3-32B4. SDFN.
9/1/2016	6:00	7:30	1.50	WOR	28		Р		HELD JSA MEETING W/ CO-ROD RIG MIRU
	7:30	15:00	7.50	INARTLT	39		Р		TSIP O, OPEN WELL UP FLUSH TBG W/ 60 BBLS 2% KCL, HAD PUMP 10 BBLS BRINE KILL, (DROP TYPE "T" STANDING VALVE!) P/U 2 1/4" X 40' PLUNGER PUMP, 3' X 3/4" STABLIZER, ON/OFF TOOL, 3' X 3/4" STABLIZER, SPOOL IN THE HOLE W/ 1,365' 16/16 CO-ROD, 3,904' - 15/16 CO-ROD, 1,072' - 16/16 CO - ROD, 845' - 17/16, 658' - 18/16 CO-ROD, SPACE OUT W/ 2' 4' 6' 8' X 1" PONYS P/U 1 1/2" X 40' POLISH ROD, FILL 1/2 BBL PRESSURE UP 500 PSI, STROKE 2 TIMES 1000 PSI
	15:00	16:30	1.50	RDMO	02		Р		RDMO WEATHERFORD #565 CO-ROD RIG HELP SLIDE UNIT FORWARD MEET W/ PUMPER OK WELL W/ HIM TURN OVER OPERATIOR

	FORM 9							
ı	6	5.LEASE DESIGNATION AND SERIAL NUMBER: Fee						
SUNDR	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:							
Do not use this form for pro current bottom-hole depth, I FOR PERMIT TO DRILL form	7.UNIT or CA AGREEMENT NAME:							
1. TYPE OF WELL Oil Well		8. WELL NAME and NUMBER: Paulsen 2-15C5						
2. NAME OF OPERATOR: EP ENERGY E&P COMPANY,	9. API NUMBER: 43013528420000							
3. ADDRESS OF OPERATOR: 1001 Louisiana , Houston,		NE NUMBER: Ext	9. FIELD and POOL or WILDCAT: ALTAMONT					
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0906 FNL 1814 FWL			COUNTY: DUCHESNE					
QTR/QTR, SECTION, TOWNSH	HIP, RANGE, MERIDIAN: 15 Township: 03.0S Range: 05.0W Meridian	: U	STATE: UTAH					
11. CHECI	K APPROPRIATE BOXES TO INDICATE N	ATURE OF NOTICE, REPOR	RT, OR OTHER DATA					
TYPE OF SUBMISSION		TYPE OF ACTION						
NOTICE OF INTENT Approximate date work will start: 1/20/2017	✓ CHANGE TO PREVIOUS PLANS	ALTER CASING CHANGE TUBING COMMINGLE PRODUCING FORMATIONS	☐ CASING REPAIR ☐ CHANGE WELL NAME ☐ CONVERT WELL TYPE					
SUBSEQUENT REPORT Date of Work Completion:	☐ DEEPEN ☐ F	FRACTURE TREAT PLUG AND ABANDON	□ NEW CONSTRUCTION □ PLUG BACK					
SPUD REPORT Date of Spud:		RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION TEMPORARY ABANDON					
DRILLING REPORT Report Date:		/ENT OR FLARE	WATER DISPOSAL APD EXTENSION					
40 DECORURE RECORDER OR	WILDCAT WELL DETERMINATION COMPLETED OPERATIONS Clearly all the	OTHER	OTHER: Squeeze					
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. This is a change to the NOI approved August 25, 2016. Based on the top stage (#4) production, we will squeeze this interval with cement. We will then test this squeeze and the August 2016 squeeze before putting the well back on production. If necessary, additional squeezes will be pumped. Date: By:								
NAME (PLEASE PRINT) Erik Hauser	PHONE NUMBER 713 997-6717	TITLE Sr EHS Specialist						
SIGNATURE N/A		DATE 1/13/2017						

Paulsen 2-15C5 Recom Summary Procedure

- POOH with rods, pump & tubing. Inspect/Repair/Re-furbish as needed. Replace any bad tubing and joints of rods.
- RIH & set CMT retainer @ 7,900' on wireline.
- SQZ stage 4 of July 2016 recompletion with 50 100 sx CMT.
- Drill out retainer @ 7,900' and CMT through perfs (7,951' 8,030'). Test Stage 4 SQZ.
 - o SQZ will be pumped again if test fails.
- Drill out retainer @ 8,250' (August 2016 squeeze) and CMT through perfs (8,308' 8,333'). Test Stage 3 SQZ.
 - o SQZ will be pumped again if test fails.
- Drill out CBP @ 8,362' (above STG 2).
- RIH w/ rods, pump, & tubing to produce stages 1 and 2 of the July 2016 recom.

RECEIVED: Jan. 13, 2017



Well Name: Paulsen 2-15C5

Company Name: EP Energy

Field, County, State: Altamont, Duchesne, UT

Surface Location: Lat: 40°13'29.635" N Long: 110°26'21.721" W

Producing Zone(s): Wasatch

Last Updated: 1/12/2017

By: Krug

TD: 11,698

API: 43013528420000

AFE:

13-3/8" 54.5# J-55 STC @ 630 ft. MD

Rod Detail @ 4.2 SPM
1-1/2" x 40' Polished Rod
658' - 18/16" CoRod
845' - 17/16" CoRod
1,072' - 16/16" CoRod
3,904' - 15/16" CoRod
1,365' - 16/16" CoRod
2-1/4" Plunger

Tubing Anchor @ 7,874'
4 jts 2-7/8" 6.5# N-80 8rd Tubing
2-7/8" x 2-1/4" X 40' Pump Barrel
Mech Seating Nipple @ 8,052'
2' x 2 7/8" Tubing Sub
4' x 2-7/8" Tubing Sub
5 1/2" x 30' PBGA
2 jts 2-7/8" Mud Anchor
EOT @ 8,156'

<u>Initial Completion Perf Information</u> 8940 - 9179 23' /69 shots

Stage #8 8940 - 9179 5000 gal HCL & 130000 lbs TLC 30/50 23' /69 shots Stage #7 9205 - 9477 5000 gal HCL & 150000 lbs TLC 30/50 Stage #6 9510 - 9781 23' /69 shots 5000 gal HCL & 140000 lbs TLC 30/50 Stage #5 9813 - 10073 22' /66 shots 5000 gal HCL & 140000 lbs TLC 30/50 Stage #4 10135 - 10460 23' /69 shots 5000 gal HCL & 150000 lbs TLC 30/50 Stage #3 10498 - 10814 23' /69 shots 5000 gal HCL & 145000 lbs Power Prop 20/40 Stage #2 10848 - 11166 23' /69 shots 5000 gal HCL & 155000 lbs Power Prop 20/40

5000 gal HCL & 145000 lbs Power Prop 20/40

23' /69 shots

Stage #1 11194 - 11494

77 jts 2-7/8" 6.5# L-80 EUE Tbg 10 jts 2-7/8" 6.5# L-80 EUE Tbg TK-900 114 jts 2-7/8" 6.5# L-80 EUE Tbg 6 jts 2-7/8" 6.5# L-80 EUE Tbg TK-900 33 jts 2-7/8" 6.5# L-80 EUE Tbg 9-5/8" 40# N-80 LTC @ 1716 ft. MD **Estimated TOC at:** 4,040 ft MD CMT Retainer @ 8,250' Squeezed STG 3; 120 sx (8/29/16) CIBP @ 8,362' Top of Liner at: 8,684 ft MD 7" 29# HCP-110 LTC @ 8930 ft. MD Drift ID = 6.059" Liner TOC @ 8684 ft CBP @ 8,905' w/ 15' CMT PBTD @ 11,612' 5" 18# HCP-110 STL @ 8684 - 11700 ft. MD

Drift ID = 4.151"



ProposedCurrent Wellbore Schematic

Well Name: Paulsen 2-15C5 Company Name: EP Energy Field, County, State: Altamont, Duchesne, UT Surface Location: Lat: 40°13'29.635" N Long: 110°26'21.721" W Producing Zone(s): Wasatch

Initial Completion Perf Information

5000 gal HCL & 130000 lbs TLC 30/50

5000 gal HCL & 150000 lbs TLC 30/50

5000 gal HCL & 140000 lbs TLC 30/50

5000 gal HCL & 140000 lbs TLC 30/50

5000 gal HCL & 150000 lbs TLC 30/50

23' /69 shots

23' /69 shots

23' /69 shots

22' /66 shots

23' /69 shots

23' /69 shots

23' /69 shots

23' /69 shots

SQUEEZED

SQUEEZED

Stage #8 8940 - 9179

Stage #7 9205 - 9477

Stage #6 9510 - 9781

Stage #5 9813 - 10073

Stage #4 10135 - 10460

Stage #3 10498 - 10814

Stage #2 10848 - 11166

Stage #1 11194 - 11494

1/12/2017 Last Updated: Krug By: TD: 11,698 43013528420000 API:

